A COMPARATIVE PERSPECTIVE OF ACADEMIC BRAIN DRAIN AT SELECTED UNIVERSITIES IN ETHIOPIA AND SOUTH AFRICA

BY

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DECLARATION

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DEDICATION

This work is devoted to my son, Amerit Zelalem Bayisa, who I have constantly kept in my heart amid the PhD journey; my adored mother, Soreti Dibaba Mama, and my beloved dad, Bayisa Gurmessa Amosa, who I have missed during the journey. This work is additionally devoted to Mr Nemme Negassa Yadeta, who infused into me the energy to seek after advanced education since my secondary school life. Finally, this work is committed to my late cousins: Wirtu Bekele Dibaba and Leta Bekele Dibaba.

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ABSTRACT

The aim of this study was to examine the possible factors contributing to the intention of scholarly staff to withdraw at three sub-Saharan Africa (SSA) universities, specifically at Addis Ababa University (AAU), Haramaya University (HU) and the University of KwaZulu-Natal (UKZN). The information was gathered from 596 scholastic staff individuals and 29 purposively chosen key sources who are senior scholarly individuals who have been working in different managerial positions as dignitaries, scholarly pioneers or heads of offices, deputy-vice chancellors and vice presidents at the three universities.

The investigation comprised a mixed methods research approach whereby the quantitative information was gathered by means of surveys and the qualitative information was by means of face-to-face personal meetings. Both descriptive and inferential statistics were utilised to break down quantitative information using the Statistical Package for Social Sciences (SPSS) programming version 24, while thematic analysis was utilised to dissect subjective information. Examination of the data demonstrated that selected demographic factors predicted the intention of scholarly staff to depart from the two Ethiopian universities whereas none of the factors predicted this at UKZN.

Notwithstanding the above findings, the impact of selected factors on the scholarly staff's intention to withdraw uncovered that the job-related attributes of the quality of work life (QWL_JC), procedural justice (OJ_PJ) and rewards and benefits (R&B) dimensions were noteworthy for AAU. The examination of subjective information demonstrated that compensation, poor working conditions and poor maintenance approaches and systems are of the key reasons why academic scholars intend to leave their institutions. On the contrary, the job characteristics dimension of QWL, leader-subordinate relationship (LMX) and R&B were found to be significantly influencing academic staff's propensity to leave Haramaya University. In this regard, subjective outcomes demonstrate that aspects such as compensation, poor working conditions, poor retention policies and strategies, politics and legislative issues, lack of appropriate technology and infrastructure, a sentiment of dissatisfaction, absence of adaptable guidelines and structures, and geographic setting of the university were the reasons causing academic staff to depart at HU. In contrast to this, only R&B were found to be significant at UKZN. In addition, analysis of qualitative information revealed that remuneration, poor working conditions, dissatisfaction, and retirement are the main reasons for the propensity of academic staff to depart. Based on the analysis of both qualitative and quantitative data, conclusions have been drawn and key recommendations have been forwarded to help the institutions retain their academics.

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LIST OF ACRONYMS AND ABBREVIATIONS

AAU	Addis Ababa University
ANOVA	analysis of variance
AVE	average variance extracted
BD	brain drain
BTS	Barlett's test of sphericity
CFA	confirmatory factor analysis
CHE	Council on Higher Education
EFA	exploratory factor analysis
HE	higher education
HEIs	higher education institution
HLIs	higher learning institutions
HRMIS	human resources management information system
HU	Haramaya University
ICT	information communication and technology
IMF	International Monetary Fund
JS	job satisfaction
KMO	Kaiser-Meyer-Olkin
LDCs	least developed countries
LMX	leader-subordinate relationship
MoE	Ministry of Education
MSV	maximum shared variance
NGOs	non-governmental organisations
OCB	organisational citizenship behaviour
OECD	Organisation for Economic Cooperation and Development
OJ	organisational justice
OJ_DJ	distributive justice
OJ_PJ	procedural justice
QWL_JC	quality of work life
R&B	rewards and benefits
SAPs	structural adjustment programmes
SEM	structural equation modelling SPSS Statistical Package for Social Sciences
SSA	Sub-Saharan Africa
Tis	turnover intentions
UKZN	University of KwaZulu-Natal
UNESCO	United Nations Educational, Scientific and Cultural Organisation

CHAPTER ONE

INTRODUCTION AND BACKGROUND TO THE STUDY

1.1 INTRODUCTION

The study of human capital flight or brain drain has been of concern to academics and development practitioners for decades (Odhiambo, 2013). In Africa, the departure of trained Africans to the global north countries is rooted in a historical context of 'slavery' and 'colonialism'(Boyo, 2013).The continent is certainly experiencing a debilitating exodus of highly trained, qualified and competent professionals and skilled people escaping their countries' economic as well as political crisis to developed countries – threatening the overall development and impending service delivery in the continent. For instance, in 2013, the migrants from the SSA represented one-third of the total stock of migrants in the Organisation for Economic Cooperation and Development (OECD) countries (IMF, 2016). While African skilled professionals' mobility remains overwhelmingly intra-continental, there is a changing pattern in the migration of Africans since the 1980s. There has been an acceleration and spatial diversification (beyond colonial patterns) of emigration out of Africa to Europe, North America, the Gulf and Asia. This diversification of African emigration seems partly driven by the introduction of visa and other immigration restrictions by European states (Flahaux & Haas, 2016).

In the past, most of the migration in the SSA has been taking place within Africa. However, recently the migration of the working age population from Africa to the OECD countries sharply increased and continue to increase rapidly over the last 20 years coupled with rapid population growth in the continent (IMF, 2016). A demographic transition resulting from strong population growth combined with a reduced infant and maternal mortality - which typically feeds migration - is set to increase even more rapidly. For instance, Africa's age population over the last 30 years has changed from 550 million in 1985 to 1.2 billion in 2015 (World Economic Forum, World Bank, & African Development Bank, 2017). With respect to skilled professionals including health workers, engineers, technology experts, researchers, and academics, the data from the OECD and the United Nations' Department of Economic and Social Affairs in 2013 has estimated that one in nine people born in Africa with a university degree or post-secondary education migrated to a developed nation outside of the African continent (Soergel, 2016).

The mobility of highly skilled professionals typically follows the flow of the larger migration in the region. Compared with other parts of the continent such as North Africa, the Middle East, and the South-East Asians, the extent of the mobility of highly skilled professionals from the SSA is persistently and significantly increasing over the years (Kigotho, 2013). This implies that Africa is losing competent and qualified human resources that are vital for the socioeconomic, political, technological and scientific progress of the continent (Moullan, 2014; Osaretin & Eddy, 2012). Despite

the existence of diversified economies in the SSA region, there is a general consensus that SSA populations are shedding workers that could potentially serve as doctors, engineers, academicians and skilled employees domestically (Soergel, 2016). For instance, a growing number of evidence have shown that a significant proportion (35%) of professionals sent overseas for training between 1982 and 1997, failed to return to the continent while the largest migratory flows originated from Egypt, South Africa, Nigeria, Kenya, Ghana and Ethiopia (Shinn, 2002). The trend continued today with the slow expansion of higher education in Africa and the expanding population on the continent resulting in a greater numbers of students travelling to study abroad in the coming years which is indicative of the trend that the mobility of talented students will be prevalent in the immediate and distant future (Woldegiorgis & Doevenspeck, 2015).

Theoretically, the term 'brain drain' was initially coined by the British Royal Society to depict the movement of researchers and technologists from the United Kingdom to the United States and Canada in the 1950s and 60s (Jauhar, Ghani, Joarder, Subhan, & Islam, 2015; Gibson & McKenzie, 2011). The term has gradually broadened to include the departure of highly skilled professionals such as "computer specialists, accountants, managers, and, among higher education levels, scientists and academics were the most common"(Gibson & McKenzie, 2011, p.109) from economically less developed to economically more developed countries. The term brain drain was also defined by the United Nations Educational, Scientific and Cultural Organisation (UNESCO). Accordingly, brain drain refers to a "one-way flow in favour of the most highly developed countries" (Kaempf & Singh, 1987) resulting in a movement of productive resources, technology, and human resources from the underprivileged emerging countries to wealthy industrialised ones. It is one of the key issues widely discussed among scholars across the globe including developing countries like Africa. In the context of higher learning institutions, the susceptibility of academic staff to the brain drain phenomenon varies both among countries and among institutions. The degree of vulnerability to brain drain is contingent on many factors like economic, political, social and technological infrastructure of the country. The vulnerability increases in regions where the rate of crime is high, war and conflict are common, and poor facilities and infrastructure are a way of life. Furthermore, the rapid loss of academics and scientists from Africa to economically more affluent countries coupled with the stalled recruitment of talent jeopardises the performance of higher education at large and puts the sustainability of the higher education system at risk.

There has been very much evidence that many educated elites from Africa, especially youth, are leaving the continent for better opportunities and a better life (Hailu et al., 2013; Benedict & Ukpere, 2012; Nabawanuka, 2011; Ngozwana & Rugimbana, 2011; Kaba, 2011; Semela, 2011; Forstenlechner, 2010; Maharaj, 2010; Pillay, 2007; Tettey, 2006; Dodani & LaPorte, 2005; Teferra, 2005; Teferra & Altbach, 2004; Dovlo, 2003; Shinn, 2002; Kaempf & Singh, 1987). Despite the lack of agreement among the scholars on the subject of whether such a phenomenon is a 'blessing' or 'curse' to Africa

remaining a contentious issue, many agree with the fact that a good number of scholars (such as educators and health workers) are leaving the continent and going to the rest of the world. Some scholars have further argued that developing countries, including Africa, will continue to experience an increasing outflow of talent and skills until such time that the socioeconomic and socio-political environment improves significantly (Teferra, 2005). A number of factors have contributed to such phenomenon. For instance, a study by Tessema (2010) explicated that despite the scarcity of highly skilled workers in many least developed countries (LDCs), 'human capital flight' or 'brain drain' is becoming a common phenomenon and is largely attributed to the deteriorating economic conditions, lack of good governance and political instability as the root causes of the brain drain in LDCs such as Eritrea. Another scholar identified four major causes of the departure of skilled professionals from Africa, namely conflict and political instability, corruption and poverty, quality of education system and unemployment and job satisfaction (Boyo, 2013).

The consequences of the departure of human capital in Africa are being researched (Boyo, 2013; Odhiambo, 2013; Osaretin & Eddy, 2012; Shumba & Mawere, 2012; Wosyanju, Kindiki, & Kalai, 2012;Tessema, 2010). Two major theories underpin the effect of the brain drain in Africa with contrary findings. The two theories are: the divergent paradigm and the convergence school of thought (Osaretin & Eddy, 2012). On the one hand, the divergent paradigm elucidates that the loss of talent through brain drain severely impacts and causes substantial setbacks for the renaissance of Africa (Benedict & Ukpere, 2012;Gibson & McKenzie, 2012; Nabawanuka, 2011; Canibano & Woolley, 2010; Kana, 2010; Tessema, 2010; Baruch et al., 2007; Nunn, 2005; Shinn, 2002). More specifically, brain drain reduces the already low quantity of skilled manpower available in African countries and needed for their development; diminishes the quantities of dynamic and imaginative individuals (regardless of whether they are business people or scholastics); builds reliance on foreign technical assistance; moderates the exchange of innovation; extends the gap between the African and industrialised nations; and it adversely affects the continent's scientific output and income lost in tax revenues and in potential contributions to gross domestic product. Moreover, it also adds to the widening gap in science and innovation amongst Africa and other continents (Tebeje, 2005). The phenomenon also entails a high social cost, as is evidenced by the departure of young, skilled workers such as doctors and nurses leaving educated and technically proficient professionals in short supply, which may mean welfare losses beyond those that are purely economic (IMF, 2016).

The convergence school of thought, however, depicts that brain drain is advantageous to both Africa and the host nations. In this line of argument, Easterly and Nyarko (2008) stated that the extent of the brain drain in Africa is over-emphasised. The benefits that the home countries are gaining in the form of remittances that the migrants inject into the national economy were largely underestimated; a gain in the form of new human capital development and opportunities for collaboration with home institutions in the form of research commitment was largely underrated (Gibson & McKenzie, 2012;

Gibson & Mckenzie, 2010; Grigolo, Lietaert, & Marimon, 2010; Kana, 2010; Franck & Owen, 2009; Rappoport, 2004). However, the negative consequences/impacts of brain drain appear to outweigh the positive ones (Gibson & McKenzie, 2012; Benedict & Ukpere, 2012; Gibson & Mckenzie, 2010). It is argued that the loss of qualified and competent professionals to developed countries has a widespread impact on the economic, political, social, demographic, technological and scientific progress of Africa, leading to a widening gap in the contribution of Africa to the livelihood of the society that produced those professionals. This phenomenon has a damaging effect on the sustainability and global competitiveness of African universities (Mutula, 2009). Furthermore, 'Brain drain' is a costly phenomenon to the source countries in the form of loss of return on investment and loss of tax revenue from those departing to other parts of the world. However, at institutional level, the departure of highly skilled professionals has serious consequences ranging from loss of valuable asset, networks and relationships, tacit knowledge and values, largely difficult to replace institutional memory and networks, staggering expense of selecting, mingling and preparing the new coming employees, diminished morale, psychological and social effects on the remaining employees that may influence the performance, motivation, and productivity of the remaining employees (Samuel, 2017)**.** This largely puts the institution at a disadvantage in terms of competing with its rivalries in the local and global labour market as it impedes the capacity of the institution or organisation to achieve its predetermined goals.

Numerous scholars have conducted studies addressing the severity of the brain drain among a wide spectrum of professionals in Africa including those from the higher learning institutions focusing on the key drivers and outcomes of the actual brain drain (Hailu, Mariam, Fekade, Derbew, & Mekasha, 2013; Benedict & Ukpere, 2012; Nabawanuka, 2011; Maharaj, 2010; Pillay, 2007; Shinn, 2008; Teferra, 2000,1997). However, past studies have shown that studying about brain drain is reactive in terms of addressing the problem suggesting that the human resource managers in the 21st century need to proactively engage in understanding the antecedents that lead an employee leaving their organisation so as to retain their highly experienced and highly skilled employees. Understanding these antecedents puts the organisation at an advantage in terms of designing mechanisms to retain such talents for the advantage of the organisation. It is against this understanding that the study employed a proxy measure, 'turnover intentions' to examine the brain drain phenomena among academics in the selected universities in Sub-Saharan Africa (SSA). Turnover intention is a key variable to analyse as it provides an estimation of employees' self-appraisals regarding their tendency to depart from the organisation in the future. It can be a useful indicator of actual turnover or could provide the opportunity to take action to stop the actualisation of the intention (Tettey, 2006).

Numerous empirical studies and turnover models have shown that intent has ended up being the best indicator of actual departure or turnover (Radzi, Ramley, Salehuddin, Othman & Jalis, 2009). Also see the seminal works of Smart (1990) cited in Tettey (2006). The term turnover intention refers to "an

individual's perceived probability of leaving an organisation or the willingness of an individual to voluntarily withdraw permanently from an organisation" (Radzi et al., 2009, p.173). Findings have shown that there is a positive correlation between intentions and the real behaviour, supporting the 'attitude-behaviour theory', which holds that a person's expectation to perform a particular conduct is a clear determinant of the actual conduct or behaviour (Radzi et al., 2009). To determine actual turnover requires a longitudinal research design that surveys and then tracks individuals indefinitely. This is a costly undertaking involving ethical issues. Certain organisational-level studies use actual turnover rates but most management-oriented and individual-level research employs turnover intention (Cho & Lewis, 2012). In addition, measuring actual turnover is complex due to challenges such as the lack of well-organised data of those who left the institutions. The other reason is that there is a lack of willingness by the institutions to disclose actual data and the reasons for the departure due to its sensitivity. They may also think that it provides a negative perception about the human capital management performance of the organisation. In order to overcome such a hurdle, recent studies have suggested that the best way to measure the extent of brain drain from Africa is from the regular reports issued by western organisations, including the Organisation for Economic Cooperation and Development (OECD) countries. However, this study employed a 'proxy' construct for turnover intention to measure the extent to which academic staff members at the selected Ethiopian and South African universities are willing to remain there or depart.

Past studies, both regional and international, as well as various sectors have identified different factors contributing to academic staff intentions to leave. Studies by various authors (Naqvi et al., 2017; Hoo, Zainal, & Chai, 2016; Junaimah, 2016; Awang et al., 2015; Chandar, Jauhar, & Ghani, 2015) can be cited in the context of Asian countries. For instance, an empirical study based on 130 academic staff in five Malaysian public universities revealed that organisational commitment induced by academic development and organisational climate consequently reduced turnover intention. Moreover, a study by Junaimah (2016) showed that both economic and non-economic reasons are behind the departure of accounting professionals from Malaysia to other relatively more affluent countries. More specifically, factors like higher perks and benefits, quality work life, simple immigration procedures, international exposure, bigger job accessibility, and a social network have a major impact on brain drain (Junaimah, 2016). In addition, the study further showed that besides money, job satisfaction should also be an area that employers focus on because without job gratification, people are compelled to leave (Junaimah, 2016). In the same manner, studies based in Africa have also documented the outcome of different factors on the employee intention to depart (Kyaligonza & Kamagara, 2017; Asegid, Belachew, & Yimam, 2014). A study based on Uganda public universities revealed factors such as poor management practices, poor motivation, poor economic incentives and poor working environment as the key factors influencing lecturers' departure from Ugandan universities (Kyaligonza & Kamagara, 2017). Another study among nursing professionals working in Southern Ethiopia aimed

at examining the factors influencing job satisfaction and the tendency to depart. The results indicated that satisfaction with the work environment and group cohesion, single cohesion and working in the hospital were significant predictors of anticipated turnover in the area (Asegid et al., 2014). As opposed to the previous studies, this study examined the effect of various factors on the academic staff's propensity to depart the three case study universities. The factors were assessed at two levels: The first part examined the effect of demographic factors on the academic staff's intention to leave whereas the second part comprehensively examined the various antecedents to the intention of academic staff to depart or leave such as quality of work life, organisation justice, leader-subordinate relationship, rewards and benefits and organisational citizenship behaviour at the three case study universities using appropriate statistical tools such as descriptive and inferential statistics. The findings of the study present both theoretical and practical implications for higher education leaders and policymakers in general and the selected universities in particular. Broadly speaking, in the context of sub-Saharan Africa, a set number of studies was conducted regarding factors contributing to academic staff's intentions to depart from their institutions focusing on the factors contributing to the departure of scholastic staff from the higher education sub-sector in Ethiopia, Nigeria, and South Africa (Ibrahim, Kassa, & Tasisa, 2017; Onah & Anikwe, 2016; Masango & Mpofu, 2013).

In the context of Ethiopia, for instance, the shortage of sufficient qualified and motivated staff is a serious challenge for the higher education system (Deuren, Woldie, & Wondimu, 2016). The scarcity of human resources is more visible in the fields of science and technology where enrolments were planned to rise. As it stands now, the minimum required qualification requirements of Ethiopian universities are 20% bachelor degree, 50% master degree and 30% PhD holders. However, in practice only Addis Ababa University is able to meet government requirements while other universities are still lagging behind (Deuren et al., 2016). There is an acute shortage of local educators in most of Ethiopian universities (Tessema, 2009). Such a gap has been filled by expatriate staff from countries such as India, the Philippines and Nigeria. The composition of the staff is also becoming largely young and inexperienced and under-qualified. For example, in 1998, the proportion of PhD holders was 28% of the total staff but it is only 9% in 2004 (Saint, 2004; Tessema, 2009). Despite the importance attached to staff qualification, there seems to be limited attention for faculty remuneration, deteriorated working conditions and lower job satisfaction possibly leading to an increase of disempowering processes among academic staff (Tessema, 2009). In addition, threats of brain drain are becoming real where qualified staff not only leaves Ethiopian higher education but also moves from younger universities to better established, less remote and older Ethiopian universities (Semela, 2011). At the same time, expansion has also led to new opportunities for staff: increased job security, positions in university leadership and scholarships for PhD degrees (Tessema, 2009). In the same ways, studies have also shown that South African higher learning institutions are also facing similar challenges in terms of attracting and retaining academics due to a number of reasons including compensation, academic

workloads, and lack of consistency in the promotion and recognition system in the universities (Ajadi, 2016). Moreover, an investigation of the factors contributing the intentions to quit among Generation Y academics in the South African Higher learning institutions revealed that employee engagement, job satisfaction, remuneration and reward and recognition are all related to the departure of academic staff (Robyn & Du Preez, 2013). A qualitative study aimed at identifying the factors that influence the global migration of South African anatomical pathologists working in the province of KwaZulu-Natal revealed that lack of recognition by clinical doctors, lack of career-path opportunities, the deterrent of compulsory service in the public sector upon qualifying, socio-economic and political instability in South Africa and endemic levels of crime were the reasons for the potential emigration of the professionals (Cassim & Ruggunan, 2014). This study, therefore, aimed to examine the factors contributing to the academic staff's propensity to depart or stay at the three universities working in the SSA nations (South Africa and Ethiopia), using a comparative approach. In addition, by means of a comparative approach, the study examined some of the organisational factors such as quality of work life, organisational justice, job satisfaction, leader-subordinate relationships, rewards and benefits and organisational citizenship behaviour, regarding the academic staff's tendency to depart from the three universities under study. Moreover, the study has also examined the effect of demographic factors on the academic staff intention to either stay or leave the universities. The study also examined the state of the higher education sub-sector in the two countries highlighting some of the challenges and opportunities facing the sub-sector at macro-level in both countries. Moreover, the study also qualitatively examined the key factors causing the departure of academic staff from the three universities. The two universities selected in Ethiopia are labelled in this study by their acronyms, AAU and HU, respectively and the third university in South Africa, by its acronym, UKZN.

1.2 RESEARCH PROBLEM WITH CONCOMITANT SUB-PROBLEMS

African universities are operating under a highly constrained environment which affects their growth and development, competitiveness and sustainability in the face of the globalised world. Prominent scholars in the area of higher education anticipated the likely issues and challenges ahead of most of African higher learning institutions at the beginning of the 21st century, highlighting the fact that African higher education is operating under both local and global constraints to accomplish its mandates (Teferra & Altbach, 2004). The authors identified issues related to "access, governance, the role of research and publishing, information technology, the academic profession, the 'brain drain' and migration of and others as key challenges at the heart of Africa's future academic development" (Teferra & Altbach, 2004). For instance, studies in the context of Ethiopian higher education revealed the following key challenges impeding the growth and development of the sub-sector: funding, staffing, teaching practices, research and community services, quality assurance and gender issues

(Deuren, Woldie, & Wondimu, 2016). The authors pinpointed that benefiting from the fruits of high enrolment and higher education expansion in Ethiopia is largely difficult if not impossible without critically addressing the described challenges. Another study based on selected South African universities revealed that retaining highly qualified and experienced academic staff is one of the key challenges facing the selected universities in the country. Some of the influencing factors for the departure of academic staff, among others, can be attributed to the lack of job satisfaction due to meagre payment, poor career growth, few opportunities for academic development, poor working conditions, heavy workload, making it difficult to meet promotion requirements and poor mentoring and capacity development (Selesho & Naile, 2014). In a nutshell, the sector is confronted with huge and multifaceted challenges running from failure to retain qualified and competent human resources due to the absence of adequate financing to participate in forefront, cutting-edge research and technological innovation. Numerous scholars have conducted studies addressing the severity of the brain drain or departure of academic staff among a wide spectrum of professionals in Africa including those from the higher learning institutions mostly focusing on the key drivers and outcomes of the actual brain drain (Hailu, Mariam, Fekade, Derbew, & Mekasha, 2013; Benedict & Ukpere, 2012; Nabawanuka, 2011; Maharaj, 2010; Pillay, 2007; Shinn, 2008; Teferra, 2000,1997). Such approach is believed to be reactive suggesting that the human resource managers in the 21st century need to proactively engage in understanding the antecedents that lead an employee leaving their organisation so as to retain their highly experienced and highly skilled employees.

Understanding these antecedents puts the organisation at an advantage in terms of designing mechanisms to retain such talents for the advantage of the organisation. It is against this understanding that the study employed a proxy measure, 'turnover intentions' to examine the brain drain phenomena among academics in the selected universities in Sub-Saharan Africa (SSA). Turnover intention, as opposed to the actual departure, provides an estimation of employees' self-appraisals regarding their tendency to depart from the organisation in the future. It can be a useful indicator of actual turnover or could provide the opportunity to take action to stop the actualisation of the intention (Tettey, 2006). The main problem of this is study was, therefore, the absence of adequate evidence (both empirical and theoretical) to investigate the antecedents, causes, and consequences of the academic staff intentions to depart at the selected universities in South African and Ethiopia. In an attempt to answer the main problem, the study dealt with the sub-problems outlined in the paragraphs below.

1.2.1. Sub-problem 1: Understanding the context, challenges, and opportunities of higher education in South Africa and Ethiopia

The higher education sub-sector in Africa is confronted with huge and multifaceted challenges running from failure to retain qualified and competent human resources due to the absence of adequate financing to participate in forefront, cutting-edge research and technological innovation. Moreover,

the sector is exposed to a number of changes and transformations both due to internal and external pressures which have a bearing impact on the working space of the academics in the sector.

Past studies have revealed and documented the major challenges facing the sector. For instance, Salako (2014) identified four major challenges facing the Nigerian universities that include inadequate financing, deteriorated infrastructure, brain drain and the lack of university autonomy. At the beginning of the 21st century, Braimah (2004) critically analysed the challenges facing Ghanaian universities which selected policy options to ensure the sustainability of universities in the country. The analysis was made from the perspective of Kwame Nkrumah University of Science and Technology (KNUST) and they involved "revenue diversification and institutional autonomy, Information and Communication Technology, Changing student mix, Quality enhancement and relevance, Administration and Management structure and process, Equity and Access to higher education and Networking and Partnership development".

Teferra and Altbach (2004) forecasted the challenges of the 21st century higher education at the beginning of the century by focusing on some unprecedented challenges such as unstoppable demand for access and recognition of higher education as a key force for modernisation and development. Despite the diversified nature of Africa and African institutions, they pointed out some of the most common elements that the higher education institutions in the continent are facing. Without much generalisation, they reckoned that African universities are working in exceptionally troublesome conditions, both in terms of the social, monetary, and political issues confronting the landmass and with regards to globalisation, and also that the road to future success will not be a straightforward one (Teferra & Altbach, 2004).

A recent study using a thorough qualitative interview of deans, directors, and heads of departments, examined the developments and challenges of higher education in economically poor countries taking the context of Ghanaian research universities with specific reference to the University of Ghana. The study identified weakness in institutional policies and infrastructure deficiency of higher education in Ghana as key challenging factors. The study further revealed that congestion of students in academic facilities of learning, teaching overloads and lack of research facilities are key factors hampering academic development in higher education. The study suggested that for improving the existing institutional set-up, it is necessary to enhance upper level education in Africa in general and the Ghanaian higher learning institutions in particular (Abugre, 2018). Another study explored issues of budgetary constraint coupled with the declining public wealth and an ever-increasing cost of education by taking the German higher education system as a case to illustrate the 'wicked' nature of university funding (Marshall, 2018). Therefore, this part of the study dealt with the state and challenges facing higher education development in general and further funnels down to the specific

case study universities based on qualitative data obtained from 29 key informants through a face-to-face interview.

1.2.2. Sub-problem 2: Antecedents to the academic brain drain at the three case study universities

This sub-problem dealt with the factors contributing to academic staff intentions to leave. Past studies, both regional and international, as well as various sectors have identified different antecedents to staff turnover. Studies by various authors (Naqvi et al., 2017; Hoo, Zainal, & Chai, 2016; Junaimah, 2016; Awang et al., 2015; Chandar, Jauhar, & Ghani, 2015) can be cited in the context of Asian countries. For instance, an empirical study based on 130 academic staff in five Malaysian public universities revealed that organisational commitment induced by academic development and organisational climate consequently reduced turnover intention.

Moreover, a study by Junaimah (2016) showed that both economic and non-economic reasons are behind the departure of accounting professionals from Malaysia to other relatively more affluent countries. More specifically, factors like higher perks and benefits, quality work life, simple immigration procedures, international exposure, bigger job accessibility, and a social network have a major impact on brain drain (Junaimah, 2016). In addition, the study further showed that besides money, job satisfaction should also be an area that employers focus on because without job gratification, people are compelled to leave (Junaimah, 2016).

In the same manner, studies based in Africa have also documented the outcome of different factors on the employee intention to depart (Kyaligonza & Kamagara, 2017; Asegid, Belachew, & Yimam, 2014). A study based on Uganda public universities revealed factors such as poor management practices, poor motivation, poor economic incentives and poor working environment as the key factors influencing lecturers' departure from Ugandan universities (Kyaligonza & Kamagara, 2017). Another study among nursing professionals working in Southern Ethiopia aimed at examining the factors influencing job satisfaction and the tendency to depart. The results indicated that satisfaction with the work environment and group cohesion, single cohesion and working in the hospital were significant predictors of anticipated turnover in the area (Asegid et al., 2014). As opposed to the previous studies, this study examined the effect of various factors on the academic staff's propensity to depart the three case study universities. The factors were assessed at two levels: The first part examined the effect of demographic factors on the academic staff's intention to leave whereas the second part comprehensively examined the various antecedents to the intention of academic staff to depart or leave such as quality of work life, organisation justice, leader-subordinate relationship, rewards and benefits and organisational citizenship behaviour at the three case study universities using appropriate statistical tools such as descriptive and inferential statistics. The findings of the study present both

theoretical and practical implications for higher education leaders and policymakers in general and the selected universities in particular.

1.2.3. Sub-problem 3: Vulnerability to brain drain and its possible causes

Brain drain is one of the key issues widely discussed among scholars across the globe including developing countries like Africa. In the context of higher learning institutions, the susceptibility of academic staff to the brain drain phenomenon varies both among countries and among institutions. The degree of vulnerability to brain drain is contingent on many factors like economic, political, social and technological infrastructure of the country. The vulnerability increases in regions where the rate of crime is high, war and conflict are common, and poor facilities and infrastructure are a way of life. Furthermore, the rapid loss of academics and scientists from Africa to economically more affluent countries coupled with the stalled recruitment of talent jeopardises the performance of higher education at large and puts the sustainability of the higher education system at risk. There has been very much evidence that many educated elites from Africa, especially youth, are leaving the continent for better opportunities and a better life (Hailu et al., 2013; Benedict & Ukpere, 2012; Nabawanuka, 2011; Ngozwana & Rugimbana, 2011; Kaba, 2011; Semela, 2011; Forstenlechner, 2010; Maharaj, 2010; Pillay, 2007; Tettey, 2006; Dodani & LaPorte, 2005; Teferra, 2005; Teferra & Altbach, 2004; Dovlo, 2003; Shinn, 2002; Kaempf & Singh, 1987). Furthermore, the mobility of academic staff is not only limited to external migration; it also involves internal migration in which case the academic staff members move out of the university system and join other sectors due to various reasons.

Despite the lack of agreement among the scholars on the subject of whether such a phenomenon is a ‘blessing’ or ‘curse’ to Africa remaining a contentious issue, many agree with the fact that a good number of scholars (such as educators and health workers) are leaving the continent and going to the rest of the world. In this respect, a study by Tessema (2010) explicated that despite the scarcity of highly skilled workers in many least developed countries (LDCs), ‘human capital flight’ or ‘brain drain’ is becoming a common phenomenon. The author attributed the deteriorating economic conditions, lack of good governance and political instability as the root causes of the brain drain in LDCs such as Eritrea. Another scholar identified four major causes of the departure of skilled professionals from Africa, namely conflict and political instability, corruption and poverty, quality of education system and unemployment and job satisfaction (Boyo, 2013). This part of the study therefore investigated the susceptibility of higher learning institutions to a brain drain as measured through the intention of academic staff to depart and the major causes underlying such a phenomenon.

1.2.4. Sub-problem 4: Defining, evaluating and managing brain drain for increased growth and development in Ethiopia and South Africa

Measurement of the magnitude of brain drain is another key project in the management of the brain drain phenomenon, particularly in the SSA. One of the major reasons is that emigration data is scarcely available and largely inconsistent in the SSA countries. There is a lack of nicely-organised, reliable and reachable data that is beneficial for policymakers. Within the absence of such complete, reliable and regular records within the respective nations and institutions, some scholars have suggested alternative information gathering in the immigration countries as an alternative to utilising locally generated facts to capture the volume of emigration from source countries (Kaplan & Höppli, 2017). This approach was argued to be a scientifically acceptable approach for the measurement and management of migration or brain drain. In fact, the immigration statistics are mainly thought to be more dependable and exact than the emigration statistics of any given country (Kaplan & Höppli, 2017; United Nations, 2010). The key challenge in the attempt to generate brain drain data locally is twofold. The first is that the emigrants often do not announce when they leave their country and this makes it essentially inconceivable for specialists to precisely track the number of people who emigrate. The second challenge is that there is a lack of well-integrated data generation and retrieval systems in the institutions due to either lack of willingness or due to the lack of capacity to establish a reliable data management system. Hence, this makes it difficult to estimate the numbers who leave either because they do not have the means to record it or the emigrants who are reluctant to declare their departure. This part of the study, therefore, explored the possible challenges facing the selected universities in relation to defining, evaluating and managing brain drain for increased growth and development in Ethiopia and South Africa in general and the institutions in particular.

1.2.5. Sub-problem 5: Impact and consequences of brain drain at the three universities

The consequences of brain drain in Africa are currently being researched (Boyo, 2013; Odhiambo, 2013; Osaretin & Eddy, 2012; Shumba & Mawere, 2012; Wosyanju, Kindiki, & Kalai, 2012;Tessema, 2010). Recently, it has become customary to read contradictory findings on the effect of the brain drain in Africa. There are at least two theories in this regard: the divergent paradigm and the convergence school of thought (Osaretin & Eddy, 2012).

The divergent paradigm elucidates that the loss of talent through brain drain severely impacts and causes substantial setbacks for the renaissance of Africa (Benedict & Ukpere, 2012;Gibson & McKenzie, 2012; Nabawanuka, 2011; Canibano & Woolley, 2010; Kana, 2010; Tessema, 2010; Baruch et al., 2007; Nunn, 2005; Shinn, 2002). More specifically, brain drain reduces the already low quantity of skilled manpower available in African countries and needed for their development; diminishes the quantities of dynamic and imaginative individuals (regardless of whether they are business people or scholastics); builds reliance on foreign technical assistance; moderates the exchange

of innovation; extends the gap between the African and industrialised nations; and it adversely affects the continent's scientific output and income lost in tax revenues and in potential contributions to gross domestic product.

On the contrary, the convergence school of thought depicts that brain drain is advantageous to both Africa and the host nations. In this line of argument, Easterly and Nyarko (2008) stated that the extent of the brain drain in Africa is over-emphasised. The benefits that the home countries are gaining in the form of remittances that the migrants inject into the national economy were largely underestimated; a gain in the form of new human capital development and opportunities for collaboration with home institutions in the form of research commitment was largely underrated (Gibson & McKenzie, 2012; Gibson & Mckenzie, 2010; Grigolo, Lietaert, & Marimon, 2010; Kana, 2010; Franck & Owen, 2009; Rappoport, 2004). However, the negative consequences/impacts of brain drain appear to outweigh the positive ones (Gibson & McKenzie, 2012; Benedict & Ukpere, 2012; Gibson & Mckenzie, 2010). It is argued that the loss of qualified and competent professionals to developed countries has a widespread impact on the economic, political, social, demographic, technological and scientific progress of Africa, leading to a widening gap in the contribution of Africa to the livelihood of the society that produced those professionals. This phenomenon has a damaging effect on the sustainability and global competitiveness of African universities (Mutula, 2009). Thus, this part of the study focused on the impact of losing competent and qualified academic staff on the performance (teaching, research and community services) and competitiveness of the higher learning institutions in general and the selected universities, in particular, using qualitative data obtained from 29 key informants.

1.2.6. Sub-problem 6: To explore how the various HR practices, policies, and strategies minimise the vulnerability to academic staff intention to depart or improve the retention of talents in the university system

Human resource management plays key roles in promoting retention of staff through devising a number of policies and strategies. Among the key HR strategies and practices found to contribute to employee retention are performance management, compensation management, coaching and mentoring, training and development, rewards and recognition, succession planning and programs (Ajadi, 2016). Previous studies have emphasised the role of HR practices in talent management. For instance, induction and socialisation and the consequences thereof (Hellsten, 2018; Rowland, 2017; Chao, O'Leary-Kelly, Wolf, Klein, & Gardner, 1994); coaching and mentoring (Geber, 2013); performance management (Amin, Ismail, Rasid, & Selemani, 2014; p.129); compensation management (Devar, 2017; Kumar & Mathimaran, 2017; Robyn & Du Preez, 2013); training and development (Ambrosius, 2018; Johennesse & Chou, 2017; Lee & Bruvold, 2003); career advancement opportunities, recruitment and selection and organisational communication, which all have an influence on staff retention. This part of the study, therefore, explored the extent to which

these HR practices are implemented effectively and how they can promote the attraction and retention of academics at the selected universities.

1.3 RESEARCH OBJECTIVES

The primary objective of the study was to investigate the antecedents, causes, and consequences of academic brain drain or propensity to depart at the selected universities in South Africa and Ethiopia. The study also had the following six sub-objectives which needed to be achieved either on the basis of data collected using a questionnaire or the key informant interviews:

1) To explore the state of Brain drain in Selected Universities in Ethiopia and South Africa.
2) To explore the vulnerability of academic staff to brain drain and its major causes at the three universities.
3) To examine what selected demographic factors and organisational factors contribute to intention to leave by scholarly staff at selected universities.
4) To explore the consequences and impacts brain drain on the performance of the three universities
5) To examine the extent to which academic brain drain can be defined, evaluated and managed for increased growth and development in Ethiopia and South Africa?
6) To examine the moderator effect of HR practices, policies and strategies on the antecedents and organisational factors in explaining brain drain
7) To develop a framework for understanding brain drain

1.4 KEY QUESTIONS PERTAINING TO THE STUDY

The research questions were derived from the research objectives stated in the sections above. The research questions were summarised as follows:

1) What are the states and challenges of the higher education sector in the two countries? And more specifically, the universities of the case studies?
2) To what extent are academic staff members vulnerable to brain drain or the intention to depart from the three universities? What are the causes, if any?
3) What are the antecedents of the academic brain drain or the intention to leave of academic staff in the selected universities?
4) In what way does the departure of academic staff impact the three universities in particular and the higher education sector in general?
5) Can the academic brain drain in Ethiopia and South Africa be defined, evaluated and managed for increased growth and development?

6) What is the role of HR practices, policies, and strategies in minimising the intention to leave of academic staff at the three universities?
7) What integrated strategies can be proposed and recommended for the respective universities to curb the trend of the academic brain drain?

1.5 MOTIVATION FOR THE STUDY

The attraction, maintenance and retention of the academic workforce among higher learning establishments are some of the key strategic issues in the higher education sub-sector in general and at the three universities in particular. This work deals with a significant portion of the time of human capital experts and line managers at all levels of the organisational echelon. In this regard, identifying the factors contributing to the departure of academic staff is a benefit to devise strategies to curb the trend for the betterment of the universities as their performance, among others, is largely dependent on the availability and effective utilisation of human resources. In addition, this study contributes to the higher education policymakers and stakeholders in their effort to develop sound policies and strategies to curb the trend. Moreover, the study was initiated with the presumption that the departure of academic staff from the universities seriously jeopardises the performance of the universities in terms of executing their mission, given the global dynamics involved in the higher education. Their sustainability depends on their ability to retain the top talent in the system.

1.6 SIGNIFICANCE OF THE STUDY

The result of this study is significant in that it contributes to the body of knowledge and the gap identified and it provides a reference point for future researchers to engage in academic staff retention and departure-related research as part of the human capital development endeavour. The study aimed at identifying the key factors contributing to academic brain drain at the three universities and the possible consequences thereof. Subsequently, the findings of this study contribute to the body of knowledge within the fields of human resource management and human capital development within the setting of higher learning institutions in the two countries. The study is also significant in that it engaged in a comparative analysis of the two countries and the two universities which adds value to the future human resource development of both countries. Moreover, this study examined the effects of the antecedents such as demographic factors using ANOVA, and certain organisational factors such as quality of work life, the organisational justice, job satisfaction, leader-subordinate relationship (LMX), rewards and benefits, organisational citizenship behaviour and turnover intentions were extracted from using confirmatory factor analysis and structural equation modelling.

1.7 SCOPE AND LIMITATIONS OF THE STUDY

This study is limited in its scope to investigating the academic brain drain situation of three universities in South Africa and Ethiopia. The construct brain drain was measured through a construct called turnover intentions or intentions to leave/depart. The study examined the influence of demographic factors on the academic staff's tendency to depart, the effect of certain antecedents or organisational factors on the academic staff's tendency to depart, and also investigated the degree of vulnerability of the universities, its main causes, and consequences and finally strategies for curbing the challenge. In terms of participation of the respondents, all academic staff members working at the three universities were part of the investigation including those working at the different echelons of the university including senior professors with a proven track record in the areas of academics, research, community service, administration and leadership. Therefore, the empirical finding of this study is limited to the data collected from the three universities and it is rarely acceptable to conclude about higher education in both countries. In all engagements between the researcher and the respondents, an effort was made to keep the anonymity and confidentiality of the data collected from the respondents both through the survey questionnaire or interview checklist.

1.8 RESEARCH METHODOLOGY

Research methodology alludes to an organised and systematic effort to examine a specific problem encountered in the work setting, which desires an answer through a series of steps that are designed and executed (Uma Sekaran & Bougie, 2016). Accordingly, this part of the study involved framing the approaches and processes followed to undertake the study and comprised the research design, research philosophies and strategies, specific research methods used to collect data, administration of data collection, data analysis and reporting in a very concise and precise manner. It also included defining the psychometric characteristics of the research instruments and documenting the ethical issues. The approaches and techniques adopted by the researcher to address the research questions are briefly outlined as follows:

1.8.1. Research philosophy and paradigm

There are two major research philosophies and paradigms widely adopted by most of the researchers in social sciences and management research. These are positivist and interpretivist paradigms. The positivist paradigm encourages an epistemological position that is based on considering the nature of connections among the components constituting the structure which more often than not utilises quantitative strategies as research tools, as these are objective and the results are generalisable and replicable (Gupta & Awasthy, 2015). Researchers with a positivist epistemological stance mostly look for explanations of behaviour, not for the meaning and hence they engage in a deductive approach to

research. They use correlation and experimentation to reduce complex interactions with their constituent parts (Gupta & Awasthy, 2015). However, the interpretivist paradigm is an approach widely employed in qualitative research or studies (Creswell, 2009, p.8). Analysis with a social constructivist epistemological position energises a subjective form of knowledge based on an understanding of the forms through which human creatures show their relationship to their world (Gupta & Awasthy, 2015). It is based on a presumption that individuals look for understanding of the world in which they live and work (Creswell, 2009). It involves subjectivity. A constructivist worldview emphatically contends that the world is socially built and so are the social marvels, as opposed to the positivist worldviews which assumes that social reality can be explained by sheer observing the casual relationships of the physical world which are assumed to be stable (Gupta & Awasthy, 2015). A pragmatist worldview "arises out of actions, situations and consequences rather than antecedent conditions" (Creswell, 2009, p.10). Researchers with a pragmatist epistemological stance focus on the problem and use all possible approaches at their disposal to understand the problem instead of focusing on the specific methods to be employed (Creswell, 2009). As a philosophical underpinning guiding a mixed method research or studies in social science, it emphasises the inquiry about the issue and that points to using pluralistic approaches to derive information about the issue (Creswell, 2009). Pragmatism gives a philosophical premise for research in that "there is no one system of philosophy and reality underpinning the study, individuals have a flexibility of choice that best meets their needs and purposes, the world is not seen as an absolute unity, truth is what works at the time, allows researchers to look to the what and how to research, based on the intended consequences – where they want to go with it, agree that research always occurs in social, historical, political, and other contexts, etc." (Creswell, 2009, pp.10-11) Therefore, pragmatism opens the gateway to numerous strategies, diverse worldviews, and diverse presumptions, as well as distinctive shapes of data collection and examination for a mixed method researcher (Creswell, 2009). Adopting this philosophy as a mixed method research is reasonable as it combines the qualities of both positivism and constructivism and gives the analyst the flexibility to choose how to gather and examine data. Furthermore, it brings together the merits of both methods of insight in understanding a particular phenomenon. As it can be understood from this theoretical explanation, pragmatism philosophy was the most relevant research paradigm for guiding this particular study as it utilises a mixed method research approach. It involves a combination of both quantitative and subjective data collection strategies for answering the research questions. Pragmatism was the best alternative for the study because it enables the mixed method investigator to utilise multiple methods, diverse worldviews, and diverse assumptions, as well as distinctive forms of data collection and analysis (Creswell, 2009, p.11). Consequently, adopting this philosophy made sense because it combines the strengths of different worldviews and paradigms. In addition, it provides the researcher with the freedom to choose how to collect and analyse the research data.

1.8.2. Research approaches

There are two essential approaches to investigate a research problem: quantitative and qualitative research (Kothari, 2004, p.5). Quantitative research aims to generate data within the quantitative form and is subjected to quantitative analysis. The quantitative approach can possibly be further divided into inferential, experimental and simulation approaches. The inferential approach helps to form a database from which to deduce characteristics of the population. This is usually known as survey research where a sample of the population is studied to infer the characteristics of the population (Kothari, 2004, p.5).

A qualitative approach is concerned with the subjective evaluation of subjective information. This approach is impacted by the researcher's experiences and impressions. Research in such a circumstance may be a work of the researcher's knowledge, insights and impressions. By and large, the techniques focus on group interviews, projective techniques, key informant interviews or in-depth interviews.

There are two noteworthy circumstances for choosing to utilise multiple methods in the same research project (Saunders et al., 2007, pp.146-147). Various techniques can be utilised for various purposes in a research endeavour. One may wish to utilise an interview for conducting an exploratory study prior to using a questionnaire to collect descriptive or explanatory data. The second benefit of using mixed methods is that it enables triangulation to happen. Hence, in order to optimise the advantages, this study employed a mixed method research approach. In this respect, the study employed a concurrent mixed method research design in which both studies can be conducted simultaneously (Cooper & Schindler, 2008, p.186).

1.8.3. Research purpose and strategies

Research purpose and strategies are highly interrelated.

1.8.3.1.Research purpose

Research purpose alludes to the goals of the research. There are three distinct types of studies regarding the purpose of the research, namely exploratory, descriptive and explanatory research (Saunders et al., 2007, p.139). Exploratory research is intended to look for new perspectives in the phenomenon and it aims to make preliminary inquiries into somewhat obscure areas of research. The findings obtained through exploratory studies are not typically generalisable to the population at large. In a nutshell, the chief goal of such research is to ensure clarity on the variables involved in the research process. Sometimes it resembles the grounded theory approach to qualitative research or interpretive research. The second major category alludes to descriptive studies which are meant to describe phenomena in

more formalised investigations and they are typically structured with clearly stated speculations or investigative inquiries (Cooper & Schindler, 2008, p.151). This kind of study serves a variety of purposes ranging from descriptions of characteristics associated with a population, estimates the proportions of a population that have these characteristics, and the discovery of associations among different variables which is sometimes labelled as a correlational study.

In a similar manner, Saunders et al. (2007, p.140) argued that the descriptive research is aimed "to portray an accurate profile of persons, events or situations". A descriptive study may be simple or complex depending on the nature of the study and the problem under investigation. Despite this, a descriptive study can be as demanding of research skills as the casual study, and require the same high standards for design and execution (Cooper & Schindler, 2008, p.151). The third typology is known as explanatory studies which "aim to provide causal explanations of a phenomenon". According to Saunders et al. (2007, p.140), "studies that establish causal relationships between variables may be termed as exploratory research".

1.8.3.2.Research design and strategies

Research strategies or strategies of inquiry refer to plans that give a specific course for procedures in a research design. It has different names such as "approaches to inquiry" or "research methodologies" (Creswell, 2009, p.11) There is no one best way or research strategy to be used for a particular study. Either one or two or more strategies could be adopted for a particular study. The study topics of different authors are different. For instance, Saunders et al. (2007, p.140) classified different types of research strategies such as experiment, survey, case study, action research, grounded theory, ethnography, and archival research. However, Creswell (2009, p.12) classified research strategies into three major categories based on the research method or approaches to data collection adopted by the researcher (whether qualitative, quantitative or both). Accordingly, experimental, non-experimental and survey design were classified under quantitative whereas narrative research, phenomenology, ethnographies, grounded theory studies and case studies were grouped under qualitative strategies and finally, sequential, concurrent and transformative strategies were classified under mixed method research. Given the weaknesses of both strategies, this particular study adopted a concurrent mixed method research approach and strategy to guide the whole research process.

1.8.4. Sampling procedures and strategies

Sampling procedures and strategies refer to the roadmap followed by the investigator to choose the sample respondents out of the populace (Saunders et al., 2007, p.140) This process includes determination of the total possible research population, target population (sample frame), sample size determination and explaining the sample selection strategies.

1.8.4.1.Total possible research population, target population and response population

For this study, the research population refers to the total number of academic staff working at the three universities (AAU, HU, and UKZN) for the survey questionnaires. Accordingly, the populace of the academic workforce of the respective case study universities was 5,417 at the time of data collection. At institution level, for example, out of the total possible research population, 2820, 1147 and 1450 of them were from AAU, HU, and UKZN respectively (see Table 1.1). The target population, however, refers to the total number of samples planned to be contacted from the list of academic staff members from the three institutions whereas the response population refers to those who have completed the questionnaires or responded to the interview questions and whose responses are analysed in the report (See both Table 1.1 and Table 1.2).

Table 1.1: Summaries of the total research, target and response populations

Institution	Proportion of respondents			Total planned sample size	Actual sample respondents	Difference[1]
	The population of academic staff	Actual sample proportion	Contingency			
AAU	2820	0.52 (188)	0.20 (38)	226	263	+37
HU	1147	0.21 (76)	0.20 (15)	91	91	+117
UKZN	1450	0.27(97)	0.20 (19)	116	116	+9
Total	5417	1.00 (361)	0.20 (72)	433	596	+163

Source: Researcher's own compilation

Table 2.2: Institutional distribution of the key informants

Institution	Planned number of key informants	Number of actual key informants	Difference	Designations of the key informants (summary)
AAU	13	10	-3	Vice presidents, directors, deans, heads of departments and senior academics
HU	13	13	0	Vice presidents, directors, deans, heads of departments, senior academics
UKZN	13	6	-7	Deputy vice-chancellors, directors, deans, academic leaders
Total	39	29	-10	

Source: Researcher's own compilation

As shown in Table 1.2, the actual number of respondents was far below the planned number of key informants. The familiarity of the researcher with the two institutions at home helped to have access to the respondents, whereas both cultural and language barriers of the researcher might have the reason for lack of access to a sufficient number of academics from UKZN.

1.8.4.2.Sampling strategies

Three universities were purposively selected for the study. The universities operate in the same educational sphere with similar mandates but are situated in relatively different socio-cultural, economic, political and technological settings. All the universities are structured in the form of campuses. AAU has various campuses including the main campus, Business, and Economics campus, Institute of Technology North Campus and Institute of Technology South Campus, College of Commerce campus, College of Health Sciences Campus and Science Campus; HU has also various campuses including main campus, satellite campuses (such as the Institute of Technology and College of Veterinary Medicine), and the Harar College of Health and Medical Sciences aimed at teaching

[1] The positive difference between the actual number of respondents and the planned sample size was due to the distribution of an extra number of questionnaires in order to enhance the response rate. Such a number of questionnaires was returned due to the involvement of the researcher both physically and virtually through all the means possible to follow-up the dissemination and collection of the questionnaires.

various fields of specialisations and engaged in a wider areas of research particularly in the fields of Agriculture, Health and related fields. Similarly, UKZN has five campuses, namely Westville, Howard, Pietermaritzburg, Edgewood and Nelson Mandela Medical School campuses. Whereas two of the universities (AAU and UKZN) are located in metropolitan areas in their respective countries, HU is located in a relatively remote part of Ethiopia about 526 km to the east of Addis Ababa, which is the metropolitan city and the business hub of the country.

Probability sampling approach was employed to disseminate the questionnaire across the three universities. The sample respondents from the respective universities were selected based on proportionate stratified and random sampling from all the campuses of the three universities. This excluded the College of Veterinary Medicine of AAU which is located on the outskirts of the city at Bishoftu; the Edgewood campus was also excluded from the sample after various attempts had been made to have access to the respondents from that side. The selection of the sample was largely representative and hence it could be generalised or extrapolated in terms of the population with confidence (Gill and Johnson, 2010, p.127). However, purposive sampling was adopted to pinpoint the key informants at the three universities based on the prior assessment. Senior academics with a proven performance track record (academic and leadership) were approached primarily to identify some of the factors that have influenced them to remain within their respective universities

1.8.4.3.Determination of sample size

In order to generalise from a random sample and avoid sampling errors or biases in a quantitative study, it become necessary for the sample size to be adequate and representative. One of the key questions here is 'How large a sample is required for a researcher to be confident that the survey results are an accurate representation of the population of interest?' (Gill and Johnson, 2010, p.128). There are two ways for determining the sample size: computation and tabular approach. For the sake of this study, the investigator found it convenient to follow the tabular approach as it leads to sample size similar to that of a computational approach. Accordingly, the sample size for the questionnaire survey was determined using the tabular approach with a confidence interval of 95% (Sekaran & Bougie, 2013, p.268). The determined sample size was proportionally allocated to the respective universities based on the total population of academic staff obtained from the respective human resources departments at the three universities. Accordingly, 21% of them were from UKZN, 44.1% were from AAU and 34.9% were from HU. However, the number of respondents for the qualitative study was determined based on convenience and data sufficiency.

1.8.5. Study area/site

The study was conducted in two selected SSA Universities, namely AAU of Ethiopia, located in the metropolitan city of Addis Ababa and UKZN of South Africa, located in KwaZulu-Natal Province. Ethiopia is in the eastern portion of Africa and South Africa is at the southern tip of Africa.

1.8.6. Construction of research instrument/measurement scales

The research instruments or measurement scales were developed after a broad survey of the literature had been conducted. Accordingly, two key measurement instruments were adopted for the study: questionnaires and a semi-structured interview checklist.

1.8.6.1.Questionnaires

The questionnaire was designed based on the existing literature, the title of the study, the problem statement, the key questions and the objectives of the study. The questionnaire was used to collect appropriate data on the demographic characteristics of the respondents, antecedents of academic propensity to depart and academic staff propensity to depart from the three universities. The questionnaire was divided into two parts.

The first part dealt with the demographic characteristics of the respondents whereas the second part consisted of both the dependent and independent variables. The 11 demographic variables were gender, age, university type, nationality, years of service, qualification, academic rank, employment situation/type, average income, marital status and areas of specialisation. Gender is a dichotomous variable classified as male and female; age was measured in five categories ranging from less than 30 years, to 3039 years, 40-49 years, 50-59 years and 60 + years; the university type involved the three institutions already referred to – UKZN, AAU and HU; nationality was measured using three variables as Ethiopian, South African, and others; years of experience (or tenure) was measured using six categories, which were less than 1 year, 1 - <6 years, 6 - <10 years, 10 - <15 years, 15 - <20 years, and 20 years and above; academic qualification was measured using five categories ranging from bachelor's degree to masters, doctorate, post-doctoral degree, and others; academic rank was measured using six categories – full professor, associate professor, senior lecturer/assistant professor, lecturer, junior/developmental lecturer/assistant lecturer, and others; three categories were used to measure the employment situation, namely temporary, permanent and difficult to define/specify. Moreover, variables such as average income were measured using six income categories that measured using Ethiopian Birr (ETB) and South African Rand (R) ranging from Up to ETB 11, 130/ Up to R6745, ETB 11,131 22,260/R6746 - R13,490, ETB 22,261 -33,390/R13,491 - R20,230, ETB 33,391- ETB 44,520/ R20, 231 - R26, 980, ETB 44,521- 55, 650/ R26,981 - R33,730, and Above ETB 55,650/Above R 33,730; marital status was measured using four categories – single, married, widowed and

divorced/separated; and area of specialisation was measured using five categories – Science, Technology , and Engineering (SET), Business and Economics, Health and Medical Sciences, Social Science and Humanities and others.

The dependent variables were the antecedents of academic staff's intention to leave, including quality of work-life (QWL), organisational justice (OJ), job satisfaction (JS), leader-subordinate relationship (LMX), rewards and benefits (R&B) and organisational citizenship behaviour (OCB). Quality of work life was measured using 13 items, organisational justice was measured using 20 items, job satisfaction was measured using 13 items, leader-subordinate-relationship was measured with seven items, rewards and benefits was measured with six items and organisational citizenship behaviour was measured with 16 items. However, the dependent variable is the academic staff intention to leave or stay. The questionnaire made use of five-point Likert scale questions ranging from Strongly Agree (1) to Strongly Disagree (5) for all the constructs.

1.8.6.2.Semi-structured interview checklist

The second primary data collection tool or instrument (qualitative data in particular) was an interview checklist. The checklist was intended to measure key research questions such as the status and challenges of higher learning institutions in the two countries and the three universities; vulnerability or susceptibility to the academic brain drain and its possible causes; consequences of the brain drain; measuring brain drain; and strategies for retaining talents in the three institutions. Hence, the interview checklist was developed in such a manner that it measured six major issues with many sub-questions.

1.8.7. Data collection method

Data collection methods refer to the sources, tools, and approaches that a researcher follows to gather both primary and auxiliary information to answer the research questions (Cooper & Schindler, 2008). There are two major sources of data for conducting a study: Primary and secondary sources. The primary data collection method includes a survey, face-to-face interview, focus group discussion, participant observation and experiments. The secondary sources, however, include all published and unpublished sources applicable to answer the research questions or meet the research objectives.

1.8.7.1.Primary data collection

After finalising the research instruments, the researcher visited all the selected universities under investigation personally for collecting the necessary data. The data collection process passed through two stages which were done concurrently. One of the stages was data collection through a questionnaire (survey) and the other stage was data collection through key informant interviews.

1.8.7.1(a) Survey

A self-controlled survey questionnaire was distributed to the target respondents in the respective universities to gather primary data with the assistance of data collectors. Before collecting the data, the researcher obtained the necessary permission from the institutional heads/deans of the institutes and colleges. Assistants were sought at the three universities and given a clear explanation of the purpose of the research. The list of academic staff members from each college was requested and the respondents were identified. The questionnaire was coded and distributed to the respective campuses in the selected universities through campus-based assistance and the supervision of the researchers. The questionnaire was made anonymous and the objective of the research was clearly discussed in the questionnaire. The respondents were guaranteed that their responses will be kept confidential and used for academic purposes only. They were requested to give their frank, honest and sincere responses.

1.8.7.1(b) Key informants

Key informant interview is one of the techniques for collecting subjective information in the journey of research (Vaus, 2001, p.10). Key informants were sought personally depending on their level of experience and exposure to the higher education management and leadership, research and community services. Before the interview, the purpose of the interview was thoroughly explained to the participants. The necessary preparation was made to record the interview session. Clarifications and doubts about the questions were cleared during the interview process.

In this respect, a semi-structured key informant interview was held with 29 key informants from the three universities (10 from AAU, 13 from HU and 6 from UKZN) to obtain pertinent information about the state and challenges of higher education in both countries, vulnerability of the institutions to academic brain drain, its possible causes and impacts, the way it is being measured and managed in the organisation and finally, possible strategies pursued by the institutions in their attempt to retain their qualified and experienced staff members.

1.8.7.2.Secondary data

Analysis of secondary documents was another data source employed to investigate the matter. In order to clearly conceptualise the subject matter and to develop an appropriate instrument for data collection, the researcher engaged in intensive desk research and review of the available, recent and relevant literature. This included books, journal articles, reports, newsletters, websites and internet sources. In addition, government documents, including legislation, subordinate legislation, regulations to Acts of Parliament, consolidated instructions, procedural manuals, delegated instructions, circular letters, minutes of meetings and *ad hoc* policy decisions, among others, were consulted. Moreover, institutional reports were closely examined in relation to the state of human resources management,

higher education challenges and governance in countries, policies and procedures, working manuals, and other published and unpublished sources in relation to the problem under study.

1.8.7.3.Administration of data collection process

The data collection process was managed by the researcher with the assistance of two data collectors at the two institutions in Ethiopia. The data was collected during the months of December to Mid-February 2017 in Ethiopia and from March to May 2017 at UKZN. The interviews were held exclusively by the researcher without seeking the assistance of any person.

To collect the data, a drop and collect strategy was adopted to collect the information from all the respondents at the different campuses of the universities with the assistance of the data collectors. The researcher distributed sufficient number questionnaires at the respective universities to overcome the nonresponse bias and thus harvest a good number of responses, which was proved to be much higher than the anticipated minimum sample size. This significant response was due to the effort, commitment, and engagement of the researcher and all the support of voluntary assistants at the respective universities during the data collection process.

1.8.8. Response rate

1.8.8.1.Questionnaire

In the case of a questionnaire, more than the minimum expected number of responses was obtained. Originally, about 414 responses were sought to be collected with a 20% allowance for overcoming the response error. However, the actual usable responses were about 596 out of a total of 700 questionnaires distributed across the three universities. Hence, the response rate was 85%.

1.8.8.2.Interviews

With respect to the key informants, originally about 39 key informants were sought to be interviewed from the three universities with 13 respondents at the three universities. However, the researcher was able to collect data from 29 key informants across the three universities. When evaluated across the three universities 10, 13 and 6 out of 13 were from AAU, HU, and UKZN respectively. The highest number of responses was thus from HU, followed by AAU and UKZN.

1.8.9. Psychometric properties of the questionnaire

1.8.9.1.Reliability

Reliability refers to "the extent to which the data collection techniques or analysis procedures will yield consistent findings" (Saunders et al., 2007, p.149). In the words of Kothari (2004), the test of reliability is one of the tests of the soundness of a measurement instrument. Accordingly, a measurement is reliable if it provides consistent results. For this particular study, the researcher employed a mixed method research approach and multiple data sources to minimise the respondent bias (Guest, 2001; Katou, 2008). For the qualitative data, the researcher employed a semi-structured interview checklist to conduct the key-informant interviews to control the subjectivity bias. Moreover, Cronbach's alpha was used to check for data consistency Thus, the reliability measurement of the instruments designed to measure both dependent and independent variables, is presented in detail, using Cronbach's alpha, in the research methodology section in Chapter 4.

1.8.9.2.Validity

Validity (what is being measured) is "concerned with whether the findings are really about what they appear to be about" (Saunders et al., 2007, p.151). It provides insight into the degree to which a measurement instrument measures what the researcher is intending to measure (Velde *et al*., 2004, pp.54-58). To this effect, the researcher used multiple items to measure a particular variable/practice. A pilot survey was also conducted at the two Ethiopian universities with a specific group of staff members from selected schools/departments and necessary feedback was taken which resulted in a slight modification of the terminologies particularly intended for measuring the organisational justice construct.

1.8.10. Data analysis

Two major approaches were followed for analysing the collected data. Appropriate statistical techniques such as descriptive and inferential statistics were employed to analyse the survey data. The Statistical Package for Social Science (SPSS) version 24 was employed for conducting descriptive analysis, analysis of variance (ANOVA) and exploratory factor analysis (EFA). In addition, IBM-SPSS AMOS version 24 was used for conducting confirmatory factor analysis (CFA) and structural equation modelling (SEM). The qualitative data was analysed using content analysis and thematic approach. In this respect, NVivo software was employed to analyse the data. The data was triangulated and corroborated to crystallise the findings.

1.8.11. Ethical issues

Research ethics refers to the appropriate moral values that must be applied by the investigator in the effort of conducting the investigations. Accordingly, before the actual investigation commenced, the researcher obtained a certificate of ethical clearance from the UKZN Ethics Committee. In addition, permission was sought from the three universities (AAU, HU, and UKZN) to conduct the research. The consent of the participants was also sought prior to their participation in this investigation. The objective of the investigation was explained to all the respondents clearly stating that their participation was entirely free and voluntary. The identity of the participants was kept anonymous and any data obtained from the members was treated as private and was only utilised for the study. Lastly, the researcher acknowledged all the sources consulted during the process and, to ensure this, the thesis will be subjected to the Turnitin programme to test the similarity index. The study employed two different kinds of measurement devices. Each of the instruments (questionnaire and interview checklist) was examined for goodness depending on the nature of the research instrument.

1.9. CONCEPTUALISATION OF TERMS

This section provides the definitions of key concepts or terms or variables used in the thesis.

1.9.1. Quality of work life (QWL)

The term quality of work life refers to the "employee's satisfaction with working life; it is a subjective phenomenon that is influenced by personal feelings and perceptions"(Lee, Dai, Park, & McCreary, 2013). In the context of universities, improving the QWL of the academics has a high and spillover effect on the overall educational and community development of a country in general (Parsa, Idris, Samah, Wahat, & Parsa, 2014). The current state of development of the concept of QWL has evolved through a number of historical moments and interventions such as "unionisation change in the 1930s and 1940s, legislation enacted in early 20th century that protected workers from incidents and eliminated job conditions were initial stages" (Phan & Vo, 2016; Walton, 1973) especially in the USA. Later the term was expanded to embrace issues such as "working condition, job security, workplace and economic gains, positive relationship between morale and productivity, equal employment opportunity, human needs and expectations, and relationship between motivation and leadership"(Phan & Vo, 2016; Subrahmanyam, Meenakshi, & Ravichandran, 2013). The issue of QWL goes beyond mere job satisfaction (Phan & Vo, 2016). Enhancing an employee's QWL will not only improve the organisation's productivity but will also improve the employee's self-actualisation (Lee et al., 2013).

1.9.2. Organisational justice (OJ)

The term organisational justice refers to the perception of fairness practices in organisational settings ranging from the way decisions are made in an organisation and the way jobs are allocated to individuals in the organisation. It includes the way performance is conducted and the associated benefits allocated to it as well as resource allocation and the different human resources management practices. Generally speaking, there are three types of organisational justice. The next section describes in detail the three types of organisational justice and the effect thereof on the employee turnover intentions or employee's intentions to leave.

The three main categories are: "distributive justice, procedural justice and interactional justice" (Lee, Kim, & Kim, 2016, p.2). Distributive justice refers to "the member's perception of fairness related to allocation of products such as wages paid through a decision conferring procedure, promotions, and recognition with the organisation" (Lee, Kim, & Kim, 2016, p.2). Procedural justice refers to "the perception of fairness in the process through which members are compensated for their investment by way of wages, promotions, and evaluations" (Lee, Kim, & Kim, 2016, p.2). Lastly, interactional justice is "concerned with the quality of interaction that members receive while engaged in a decision conferring procedure" (Lee, Kim, & Kim, 2016, p.2).

1.9.3. Job satisfaction (JS)

Job satisfaction is the most widely investigated subject in workplace psychology and has been defined differently by different authors. There is no all-round acknowledged definition of the term job satisfaction. However, many agree that job satisfaction is "a multi-dimensional concept that includes a set of favourable or unfavourable feelings in terms of which employees perceive their jobs" (Bowen & Cattell, 2008, p.260). In addition, the term refers to "the extent to which people like or dislike their jobs" or "it is a positive state of mind or emotional feeling resulting from once own evaluation towards once experience by comparing what he or she expects from his or her job and that he or she actually gets from it" (Lo & Ramayah, 2011, p.429). The term has been widely discussed in the management and organisational behaviour literature because it is the key to determining the performance and productivity of an employee (Mehboob & Niaz, 2012). The term does allude to the fulfillment, satisfaction, and enjoyment that come from work and it does not necessarily relate to the cash or periphery benefits but the emotions workers experience from the work itself (Asegid et al., 2014).

1.9.4. Leader-subordinate relationship (LMX)

Leader-subordinate relationship alludes to the relationship between leaders and employees within the work environment. The leaders are not able to approach all subordinates with the same authority, mainly due to their restricted control, time and assets within the association coming about within the

improvement of different qualities of administration between themselves and their subordinates (Yildiz, 2018). In essence, this term or theory attempts to explain how leaders use their power, time, and limited resources while developing various relationships with subordinates.

1.9.5. Rewards and benefits (R&B)

Reward management is the process of designing and implementing strategies to reward employees fairly with the goal to pull in, motivate and retain those employees that are believed to help facilitate the realisation of organisational goals (De Gieter & Hofmans, 2015; Dulebohn & Werling, 2007) The degree of influence of the rewards and benefits on the employees' decision to remain or depart largely depends on their convictions about or satisfaction with the rewards and benefits (Gupta & Shaw, 2014). Satisfaction with rewards and benefits can be defined as "the degree to which an employee is satisfied with the rewards (i.e., financial, material, and psychological) and it is typically measured by using a bipolar scale ranging from 'totally dissatisfied' to 'totally satisfied' or "strongly disagree" to "strongly agree" (De Gieter & Hofmans, 2015). According to the authors, there are three kinds of rewards in the 21st century organisation with varying degrees of implementation and practices. These are (1) financial rewards (base pay and bonuses), (2) material reward and benefits (training opportunity and health insurance), and (3) psychological rewards (recognition from a supervisor, a complement from colleague).

1.9.6. Organisational citizenship behaviour (OCB)

The term organisational citizenship behaviour was originally defined by Organ (1988, p.4) as " the behaviour that is discretionary, not directly or explicitly recognised by the formal reward system, and that in the aggregate promotes the effective functioning of the organisation" (Organ, 1997, p.86). Later, it was redefined as the range of actions and mannerisms that contributes "to the maintenance and enhancement of the social and psychological context that supports task performance" (Organ, 1997, p.91). Accordingly, OCB has five conceptual dimensions– "altruism (helping others), courtesy (helping prevent problems), sportsmanship (positive attitude, avoiding complaining), conscientiousness (exemplary attendance, punctuality etc.) and civic virtue (active participation in the organization)". Since the introduction of these five dimensions, others have been added and second-order latent concepts combining various dimensions have been suggested (Podsakoff, MacKenzie, Paine, & Bachrach, 2000; Williams & Anderson, 1991).

1.9.7. Turnover intentions (TIs)

Employee turnover remains one of the critical areas of concern for both practitioners and researchers due to its costly nature and its negative effect on firm performance (Poon, 2012). Previous empirical studies have shown that turnover intention is a direct precursor and important predictor of actual

employee turnover or brain drain (Poon, 2012). The term denotes to a mindful and thoughtful wilfulness to depart from one's organisation (Poon, 2012; Tett & Meyer, 1993). There are certain advantages of using turnover intentions as proxy measures of actual turnover. First, it is practically difficult, if not impossible, to tract the actual turnover as it involves costly exercises such as conducting longitudinal research (Poon, 2012). Secondly, it is beneficial because it allows the institutions to take remedial actions before the actual turnover is materialised (Gim & Desa, 2014). Therefore, the tendency to depart is justified to be examined as a substitute for turnover behaviour (Gim & Desa, 2014; Poon, 2012). Thus, in this particular study, turnover intention is examined as the depending variable. Moreover, the terms 'turnover intentions', 'intentions to quit', 'intentions to depart, 'propensity to depart' and 'intentions to leave' are used interchangeably

1.9.8. Brain drain (BD)

The term brain drain was "originally coined by the British Royal Society to describe the migration of scientists and technologists from the United Kingdom to the United States and Canada in the 1950s and '60s"(Jauhar, Ghani, Joarder, Subhan, & Islam, 2015, p.703). Semela (2011) identified two facets of brain drain: the internal and external. Internal brain drain is a situation where highly educated and skilled employees voluntarily decide to leave a particular sector to join another sector. External brain drain refers to a situation where the most educated, knowledgeable and high calibre individuals decide to depart from their country of origin to work in developed countries. The latter broadly signifies the large-scale emigration of educated, skilled and qualified individuals from less developed countries to more developed countries for reasons such as the better quality of life, opportunities, and facilities, conflicts, health-related hazards or other reasons (Baruch et al., 2007; Kana, 2010). This study covered any form of permanent departure from the higher learning institutions to either abroad or to the 'industry next door' for different reasons. Another definition brain drain by UNESCO refers to a "one-way flow in favour of the most highly developed countries" (Kaempf & Singh, 1987), resulting in a movement of industrious resources, technology, and human resources from the underprivileged emerging countries to wealthy industrialised ones. This definition is limited in that it only addresses the external brain drain section and not the internal mobility of people from one sector to another sector.

1.10. STRUCTURE OF THE THESIS

The thesis comprises seven chapters, as presented in the following sub-sections.

1.10.1. Chapter 1: Introduction

The first chapter provides a snapshot of the thesis by means of the introduction and background of the study; it highlights the problem statement with concomitant sub-problems, specified research

objectives, highlighted research questions pertinent to the study, motivation of the study, significance of the study, scope and limitations of the study, summarised research methodology, conceptualisation of terms, structure of the thesis and a summary of the chapters.

1.10.2. Chapter 2: Higher Education context in Ethiopia and South Africa

The second chapter of the thesis primarily presents the higher education setting and context in both countries in its broadest sense. It further examines the origin of the concept of higher education, its philosophical underpinnings and theoretical foundations; higher education profiling in a sub-Saharan context and a global context; the challenges and opportunities confronting SSA higher education institutions (HEIs) and finally, it concludes by summarising the content of the chapter.

1.10.3. Chapter 3: The Concept of Brain Drain

The third chapter discussed the theoretical framework, measuring of brain drain, types of brain drain, vulnerability to occurring of brain drain, characteristics of brain drain (internal versus external), factors influencing brain drain, impacts and consequences of brain drain, strategies for curbing brain drain, a conceptual framework, and a summary.

1.10.4. Chapter 4: Research Methodology

The fourth chapter deals with the research methodology. More specifically, it discusses the research philosophy and paradigm and appropriate philosophy for this particular study; provides an overview of research methodology theory; provides the research approaches adopted for the study; as well as the research purposes and strategies, methodological choices, research setting, sampling techniques and procedures, analysis of data, psychometric properties of research instruments (validity and reliability), ethical considerations and limitations, and a summary.

1.10.5. Chapter 5: Analysis, interpretation and presentation of findings

The fifth chapter deals with the analysis of the findings. It presents the demographic characteristics of the survey respondents and key informants; the state of HE at the two countries and the three universities; empirical findings of antecedents to brain drain; intentions to depart or leave; as well as the susceptibility to brain drain, major causes of brain drain, nature and characteristics of brain drain, measuring and managing the brain drain phenomenon, strategies adopted for curtailing brain drain in HE, and a summary.

1.10.6. Chapter 6: Explanation of findings

This chapter provides the results of the study and an interpretation and presentation of findings. It explains the findings against the existing body of knowledge. It comprises the narrative of the demographic factors, explanation of the state of HE in the two countries and the universities in particular, examination of the antecedents to brain drain at the three universities, characterisation of brain drain at the three universities, causes of brain drain at the three universities, impact and consequences of brain drain at the three universities, principal strategies for curtailing the trend at the three universities and a summary.

1.10.7. Chapter 7: Summary, recommendations and concluding remarks

This chapter contains an overview of the chapters, makes recommendations and concluding remarks.

1.11. SUMMARY

This chapter provided a background of the thesis by specifying the problem statement, research question, research objectives, research methodology, and conceptualisation of the key variables and structure of the thesis.

CHAPTER TWO

HIGHER EDUCATION CONTEXT IN SOUTH AFRICA AND ETHIOPIA

2.1. INTRODUCTION

Higher learning institutions play a pivotal role in enhancing the advancement of a country through the creation, production, and diffusion of knowledge and the production of capable and competent human capital. African nation states have devoted much of their scarce resources towards the advancement of higher learning institutions with the aim of developing the necessary professionals for upholding the African renaissance over a couple of decades. However, the sub-sector is not without a challenge. Higher education is presently operating under difficult conditions, facing multifaceted challenges ranging from the mismatch between demand and supply, inability to attract and retain highly competent and experienced academics and researchers, attracting sufficient resources to run the business of the sub-sector coupled with the challenges of leadership and governance and continued student unrest for access and equity. This chapter, therefore, discusses the higher education context in South Africa and Ethiopia. In addition, the chapter expounds the profile of the higher education sub-sector and the key challenges facing the higher learning institutions in the SSA.

2.2. ORIGIN OF THE CONCEPT, PHILOSOPHICAL UNDERPINNINGS AND THEORETICAL FOUNDATIONS OF HIGHER EDUCATION

The genesis and early developments of higher learning institutions vary from continent to continent and have never been linear and straight. Contemporary experts in the area viewed the advancement of higher education from different perspectives. For instance, from global or international perspectives, there are “three main phases: the modern university in the early nineteenth century, when the universities made a claim for more autonomy from the state; the research university between 1870 and 1920, based on the interdependence of teaching and research which involved both students and teachers in the process; and the mass university after World War II when increasing numbers of people were claiming access, especially in the USA” (Uetela, 2017, p.42). The author argued that such descriptions are only valid for higher education in the west and they slightly match the evolution of universities across the globe, and particularly that of African higher learning institutions (Uetela, 2017). Thus, the exact place where higher education emerged and developed remained one of the areas of contention among higher education scholars.

Mainly, “there are two points of view concerning the roots and development of the ancient model of higher learning and how this is related to Africa: endogenous, which has dominated African literature and exogenous, which has been popular with western scholars which address the origin and

development of universities prior to the modern and contemporary typologies, but disagree over the emergence of higher education" (Uetela, 2017, p.43).

Whereas an overwhelming number of ethnophilosophers of higher education scholars contended "that the first universities emerged in Africa", some western scholars argued strongly that "higher education started in Europe and then expanded to other parts of the world" (Uetela, 2017, p.43). According to those European scholars, the route to modern universities or higher learning in African originated in Europe (Germany) and expanded to the USA and then to Africa. They argued that the higher education across the world, including in the USA, was very much the offsprings of the European parentage (Lucas, 2006, p.100), attesting that the origin of modern universities were Europe. However, this common and dominant argument was challenged by some scholars such as Teferra and Altbach (2004) and Uetela (2017). Researchers on two sides of the narratives presented their own evidence. Some researchers on the western side of the contention trusted that advanced education in Europe grew sequentially because of the changing social flow and examples and all the more so because of the need of learning to logically translate these social changes. Notwithstanding, amid the medieval period, the beginning of advanced education can be credited to the need to comprehend social change and transformations (Uetela, 2017, p.44). Despite what might be expected, different researchers have contended for the presence of prior types of cutting edge learning in Africa, which started in Egypt and spread to the Greek, Roman and Persian realms over the span of Islamisation of Africa (Uetela, 2017, p.44). Their view is that understanding the starting point of advanced education may require burrowing past the Middle Ages and the foundation of the University of Bologna to the time of old Egypt and Timbuktu in current Mali (Uetela, 2017, p.44). This contention is upheld by Teferra and Altbach (2004) who reliably and constantly contended that the source of advanced education on the planet is in Africa and they stated that the Al-Azhar in Egypt is one of the most established colleges still in existence on the planet. Woldegiorgis and Doevenspeck (2013) archived the presence of the practice of education at all levels in pre-colonial settings of Africa. Noticeable scholars of African higher education have reported that the beginging of African higher education dates back to the pyramids of Egypt, the obelisks of Axum in Ethiopia, and the Kingdom of Timbuktu (Woldegiorgis & Doevenspeck, 2013). Along these lines, the presence of complex civilisations and higher education learning spaces in Africa before the landing of Europeans demonstrates that the practice of education at all levels was set up in pre-colonial settings of Africa (Uetela, 2017; Woldegiorgis & Doevenspeck, 2013).

Yet, the western narratives remained a dominant one in shaping the argument on the genealogy and development of 'modern' advanced education on the plantet. The northern universities stayed predominant in the 15th century for different reasons including the decline of advanced education in Africa, the absence of leadership and neglect of the local authorities "to recognise African institutions

as the foundations of higher education" (Uetela, 2017, p.44). In any case, regardless of the nonchalance, the view that African training establishments were the pioneers of advanced training remains incontestable since topographical area of a portion of these early advanced education foundations is affirmed when one researches the prehistoric studies of advanced education in Egypt and Mali (Uetela, 2017, p.44).

The begining of 'contemporary' African advanced education, in any case, was set up in the light of Africa's battle for freedom after roughly 500 years of Western settlement, during which time there was little emphasis on advanced training in the region (Uetela, 2017). The opening up of national universities taking the names of either cities or countries or names of the leader responsible for the creation of a liberation movement in that respective country or the name of the first head of state after independence is evidence that the establishment of modern universities in Africa was related the post-colonial era (Uetela, 2017). Thus, except for a couple of nations such as Sierra Leone, Liberia, South Africa and Uganda, who had universities in the late 19th and early 20th century; it can be claimed that the dominant part of African universities had associations with the independence for their establishment or origins (Uetela, 2017, pp.70-71).

The post-colonial higher education in Africa had the mission of improving the economic, political and technological situation of the respective nation-states and the sub-sector and had witnessed a number of policy reforms during the post-independence era across the SSA countries (Uetela, 2017, pp.50-69). By looking into the various initiatives taken by the nation states in Africa to transform higher education, one can witness that transformation (economic, social, political and technological) was at the epicentre of the decisions. Some of these reform agendas included: "The quest for designing a curriculum that is relevant to the job market by incorporating skills that are related to professional expertise; higher education reform in Africa has been shaped by global agendas which accounts for the relationship between education and other indexes such as the health of citizens, knowledge, growth, and sustainability; public-private partnership or cooperation to enhance access to higher education; oriented towards problem-solving specifically in the context of the continent and particular national and regional upheavals; the higher education policies have also been reformed in order to encounter gender equality of access; and the higher education or universities in Africa were perceived to be mechanisms for poverty eradication" (Uetela, 2017, pp.70-73).

Though the early universities were largely elite-oriented and less-inclusive of the larger population for a number of reasons such as lack of sufficient infrastructure, the sub-sector had gradually expanded and accommodated as many students as a possible. Yet, the sub-sector is facing challenges in terms of access and ensuring equity due to the lack of sufficient funding and infrastructure vis-à-vis the booming African population of youngsters. Furthermore, the sub-sector has passed through many challenges ranging from diminishing financial resources in the 1990s as a result of the policy of the

external funding bilateral organisations such as the World Bank and the International Monetary Fund (IMF), to the need for growth and the demands of fairness which have led to the problem of governance challenges that have seriously hampered the journey of African higher learning institutions (Uetela, 2017, p.42). Therefore, the current face of African higher learning institutions was shaped by a number of interactive forces both from within and outside. Today, Ethiopia has about 42 public universities compared to less than three universities three decades ago and South Africa has 26 publicly-funded universities.

2.3. HIGHER EDUCATION PROFILING IN A SUB-SAHARAN AFRICAN CONTEXT

The term higher education has been described differently by various authors or institutions but with a similar theme. According to the Merriam-Webster dictionary, the term higher education refers to "education beyond the secondary level, especially education provided by a college or university"[2]. Moreover, IGI Global, describes the term higher education was more comprehensively "a level of education that is provided by universities, vocational universities, community colleges, liberal arts colleges, institutes of technology and other collegiate level institutions, such as vocational schools, trade schools and career colleges that award academic degrees or professional certifications[3]". Further, the term can also be defined from the perspective of the countries, as listed in Table 2.1 below.

Table 2.1: Conceptualisation of higher education in Ethiopia and South Africa

Country	Proclamation number	Definition of Higher education
Ethiopia	Higher Education Proclamation No. 650/2009	"higher education" refers to "education in the arts and sciences offered to undergraduates and graduate students who attend degree programmes through any of the delivery modes stated under Article 19 of this Proclamation"
South Africa	Higher Education Act 101 of 1977	the term "higher education" refers to "all learning programmes leading to a qualification that meets the requirements of the Higher Education Qualification Framework (HEQF)"

Source: Researcher's own compilation based on the higher education act/proclamation of the respective countries

Higher education plays a key role in "the social and economic development through four noteworthy missions: the formation of human capital, the building of knowledge bases (primarily through research and knowledge development), the dissemination and use of knowledge (primarily through interactions with knowledge users) and the maintenance of knowledge (inter-generational storage and transmission

[2] Source: https://www.merriam-webster.com/dictionary/higher%20education retrieved on 5 June 2018
[3] Source: Retrieved from https://www.igi-global.com/dictionary/inciting-grassroots-change/13097 on 15 August 15, 2018

of knowledge)" (Pouris & Inglesi-lotz, 2014, p.1). According to Tilak (2011, p.28), the growth of higher education in SSA was affected by pre-historic events such as the "long period of colonial rule" and "the policies of the world". It is against this notion that the next sub-sections explain the contexts of higher education based on the review of the literature using a funnel approach and starting from the broader global perspective to the SSA context and down to the specific countries (Ethiopia and South Africa).

2.3.1. Global landscape of higher education

Global higher education is characterised by internationalisation of the sub-sector with four key trends including "the increasing trend in intentional student mobility flows in the years to come having both demographic and economic impact, the possible emergence of new models of global higher education partnerships - such as teaching partnerships and provision of degrees off-shores, changing patterns in research output and its growing internationalisation, and decreasing state funding resulting in the commercialisation of research activities that higher education institutions in different countries engage in response to decreased investment in higher education across a growing number of countries" (British Council, 2012, p.4).

Evidence on international student mobility computed by the UNESCO Institute of Statistics uncovered that four countries alone – China, India, US, and Russia – have a combined share of 45% of aggregate worldwide tertiary enrolments (British Council, 2012). Other developing economies with noteworthy quantities of tertiary enrolments comprise Brazil (6.2 million), Indonesia (4.9 million), Iran (3.4 million), South Korea (3.3 million) and Turkey (3.0 million) (British Council, 2012). From sub-Saharan Africa, South Africa plays a critical role and is considered a major destination at regional level, contrasted with the rest of the nations such as US, UK, Australia, France, Germany, Russia, Japan, and Canada, hosting 60% of international students in total (British Council, 2012).

2.3.2. Sub-Saharan African higher education context

Advanced education is presumed to be the wellspring of jobs in most African nations and thus people invest a lot for their children to attend tertiary education locally, regionally and internationally. Yet, African higher education is lingering behind the rest of the world in terms of its capacity to enrol students. The sub-sector is giving its rare assets to build up the required experts for upholding the African renaissance for the last many decades despite the difficult circumstances within which they are currently operating. These circumstances emanate from the following long list: the scarce resources, poor facilities and infrastructure, inadequately qualified scholastics, increasing number of young and less experienced academics, internationalisation and globalisation, mounting expansion of enrolments and the subsequent increasing cost of tertiary education in an economically poor continent

(Teferra, 2013), attitude towards teaching and training and less commitment to research and advancement, exodus of human capital to economically affluent parts of the world such as western countries, deteriorating quality of education, deteriorating quality of life of the faculty members (Semela & Ayalew, 2008), political problems and political interferences by the nation states, making the higher education governance and leadership relatively rough and challenging (Teferra & Altbach, 2004).

With respect to the interference of the states in the affairs of higher education in Africa, some scholars continually criticise the involvement of government or the state in the day-to-day affairs of academic institutions, suggesting that academic institutions should be led by prominent professors or academics and not by political appointees (Oluwasanya, 2014). In this context, the absence of institutional autonomy during the planning and implementation of the strategies of higher education in most African countries, including Ethiopia, and the lack of academic freedom by the personnel working there, are factors pointed out by scholars in the area (Molla, 2014; Oluwasanya, 2014). Against this background, Bezes et al. (2012, p.e2) explained that "the deployment of New Public Management (NPM) approach, which emphasises on efficiency and effectiveness of the sector, is an attack on the scientific and pedagogical autonomy of academics by diluting their representation, promoting employment by contract, funding research by projects and quantitative assessment". Furthermore, they challenged the applicability and practicality of executive type of leadership in the higher education sector without much evidence (Smeenk et al., 2009). This is in line with a survey conducted in six European universities suggesting that executive type of management or managerialism is favoured, at least in these universities. Those who are in favour of the state intervention in the affairs of the higher education sector argued that the government should ensure that universities are efficiently utilising state funds, effectively achieving their goals, accountable and responsive to the community at large. They suggested that universities should work as the right arm of the government in ensuring the pressing social, economic, political and cultural developmental challenges in the respective countries (Molla, 2014). Given the context of higher education in Africa, what level of involvement of the state in the affairs of the universities and their management practices should be applied is worth exploring, particularly in the context of African higher education institutions. Moreover, the changing context of the globe and the region is impacting higher education in the region both in terms of its capability to remain visible and to compete at the global level and fulfil its mandate at the local level in the same manner. The other peculiar characteristic of SSA higher education is that there is unbending competition among the sectors both locally, regionally and internationally over student recruitment and funding. The research platforms also vary among universities and countries. The employment of information communication and technology (ICT) has also changed the modes of delivery in the higher education sector in general and the SSA in particular though most of the regions are still lagging behind in terms of implementing cutting-edge technologies in the teaching-learning, research and community

engagements. The advent of social media and social networks has revolutionised the commination process and enhanced academic networking across the globe. Before the introduction of such technology, the academics were operating in isolation and there was a duplication of effort and work. As much as the advent of technology has helped the higher education sector to become innovative and efficient, it has also caused some challenges such as the poor motivation of staff members and the students to innovate and become creative in their places of work. Technology has made things easy in a way that people fail to employ their analytical capability to the maximum possible.

The higher education sector has also faced an alarming rate of student enrolment over the last couple of decades with the expansion of the physical facilities such as classrooms, offices, libraries and laboratory facilities. Various policy frameworks have also been proposed by the nation states to ensure the quality and relevance of the education system in their respective countries. However, countries vary in the implementation of those policies to bring about the aspired goals as stipulated, either due to the lack of human or financial capacity. Also with the advent of globalisation, the higher education sector is facing a challenge of attracting and retaining competent and qualified human resources due to various reasons. The challenge may be due to a variety of reasons: the continued decline of the academic freedom of the staff members; declining intellectualism in the sector from time to time; the poor remuneration system in the sector; the poor working climate or conditions in the sector; other external socio-political and economic factors defining the context of the sector; and the lack of sufficient resources (infrastructure and research fund) to conduct research which is a gateway to local and global networking for academics.

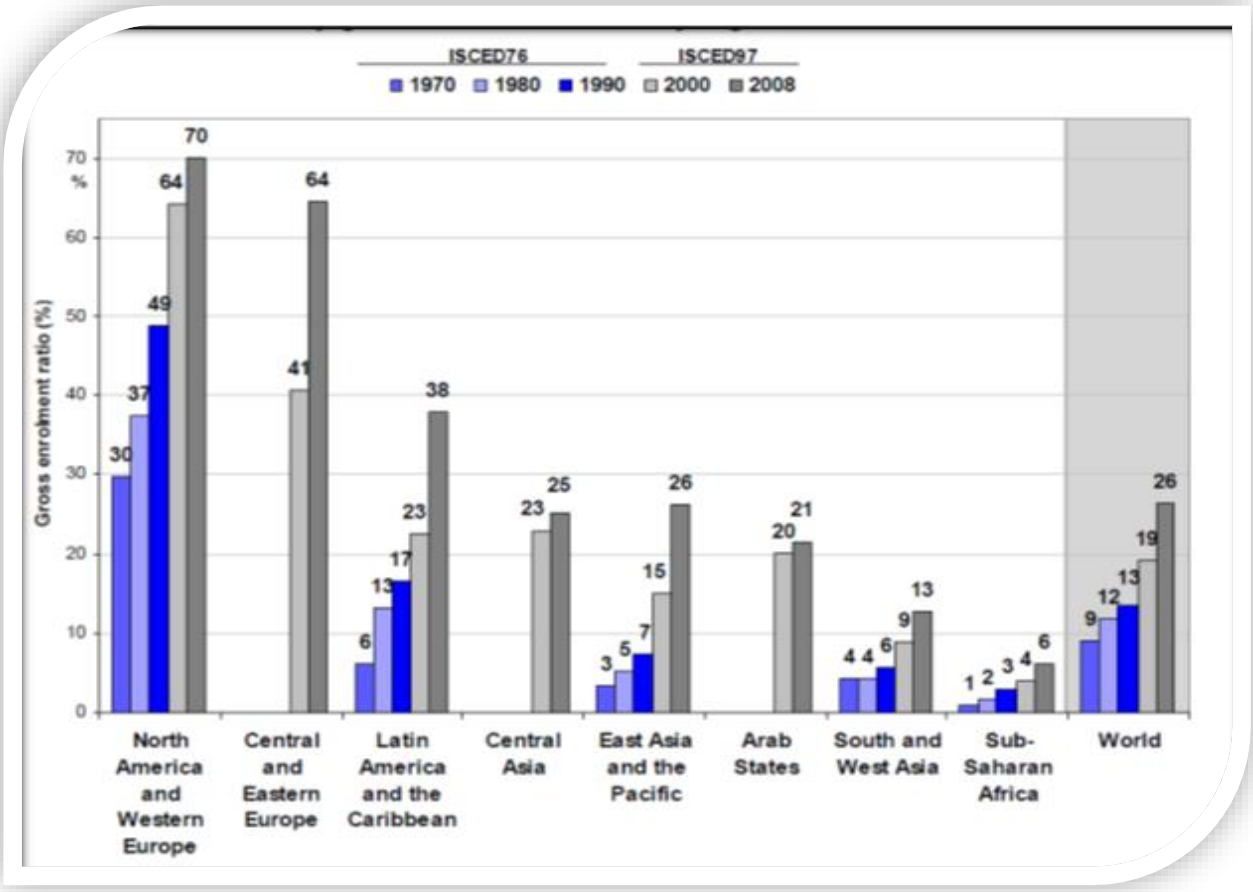


Figure 2.1: Gross tertiary enrolment ratios from 1970 to 2008

Source: Adapted from UNESCO Institute for Statistics Fact Sheet (2010, p.2)

As portrayed in Figure 2.1 above, the overall enrolment figure across the globe has increased significantly since 1970 by 26 folds and compared to the six-fold increase in the SSA. This figure shows that SSA is still lagging behind in terms of student enrolment in the higher education. What makes the matter worse is that the majority of the population in Africa are young and are in need of access to tertiary education, which is one of the reasons why Africa is losing its youth to the rest of the world either formally or informally.

2.3.2.1. Ethiopian higher education context

The current face of tertiary education in Ethiopia is the result of the long history of traditional education, the influence of western countries' policies, and the current challenges and opportunities. Conceptually speaking, higher education in Ethiopia refers to education programmes which are offered as an undergraduate degree for three, four or more years and specialised degrees such as Masters and PhD programmes. The first tertiary education started with the establishment of the Haile Selassie I

University in 1961. The name was later changed to the Addis Ababa University (AAU) in 1974. Before 1991, there were no more than three universities in Ethiopia, namely Addis Ababa University, the Alemaya University of Agriculture (which was later named as Haramaya University) and Asmara University (Eretria was part of Ethiopia during that time).

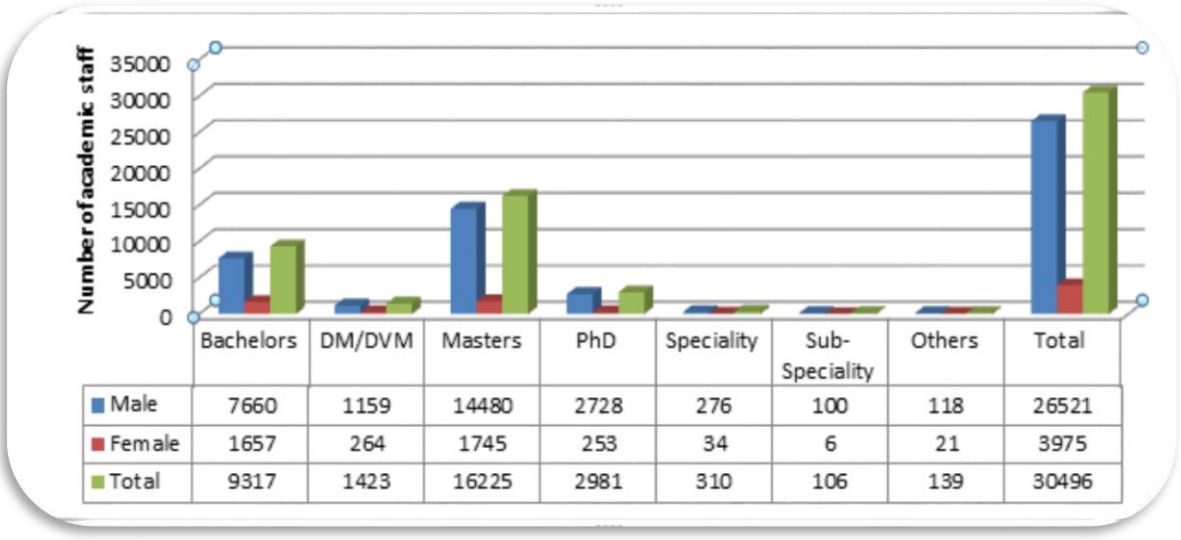
The fall of the socialist government (Dergue) in 1991 and the institution of the Federal Democratic Republic of Ethiopia (FDRE)) government, with the underlying ideology of a slightly market-oriented economy, necessitated the initiation of higher education policy and strategies in Ethiopia. With the change in the socio-economic context of the country with EPRDF coming to power, there was a chronic and acute shortage of human resources in the public services as many of the people and professionals left the country for other parts of the world due to the long years of civil war and lack of conducive working climate. During the early 1980s, the country lost a high number of professionals ranging from health professionals and academics to engineers. This phenomenon necessitated for the government to develop the first national training policy framework which was later developed into a higher education proclamation and thereafter upgraded to the current revised higher education proclamation no.650/2009 governing the sub-sector in the country (Yizengaw, 2005, p.3). The policy and strategy were developed with the objective of expanding tertiary education in the country to fulfil the human resources gap in the country with various areas of specialisation.

The Ethiopian higher education sub-sector today, with all its challenges and opportunities, is booming in terms of student enrolment. A report issued by the Ministry of Education of Ethiopia has indicated that there has been an immense improvement in enrolment both at the undergraduate and postgraduate level both in government and non-government institutions (MoE, 2017). In the 2015/16 academic year, for instance, about 778,766 undergraduate students were enrolled (both in government and non-government institutions) in regular, evening, summer and distance programmes of which 265,851 (34.14%) were females. The majority, i.e. 84.8%, of these students are enrolled in government institutions, with 15% at private institutions. Undergraduate enrolment is highest in regular programmes and lowest in distance programmes, making the share of undergraduate enrolment 54.6%. When examined across years, a large increase has been observed from 1996 E.C. to 2008 E.C, with an average annual growth rate of 24.5% (MoE, 2017). Female enrolment showed a big increment over the time period, showing that progress is being made in narrowing the gender gap in enrolment. But there still needs to be further improvements in this area with over double the number of men enrolling in undergraduate programmes compared to women in 2008 E.C. (2015/16) in order to achieve the Educational Sector Development Plan (ESDP) V target. In addition, in the context of government institutions, the highest number of enrolment was registered in the fields of engineering and technology and the lowest in the fields of agriculture and life sciences, making the natural science to social science ratio of 62:38 which is slightly lower than the government's aspired target of 70:30 (MoE, 2017).

However, despite the increased number of universities and enrolment figures, the sector is still in its infancy and underdeveloped, with the enrolment figures dismal compared to sub-Saharan African standards.

The higher education system has also been struggling with multi-layered challenges (Yizengaw, 2005, p.2; Semela & Ayalew, 2008). The deteriorating working conditions of teaching personnel have substantially affected the performance of the higher learning institutions (HLIs) in the country. The extensive expansion occurs without sufficient investment in learning resources such as laboratories, libraries, and ICT infrastructure, sports and entertainment facilities and, more importantly, staff offices (Semela & Ayalew, 2008). The other challenge is the ever-deteriorating living standards of the teaching personnel in HEIs. For instance, the monthly salary of a full professor in Ethiopian HEIs is markedly low compared to the salaries of the expatriate counterpart with similar educational background and experience. This condition compromises staff commitment and keeps staff morale low, thus making it difficult for the higher education system to get a foothold on expansion problems.

The human resource profile of the higher education institutions in the country shows that there is an increasing trend in the number of local and expatriate academics in both government and non-government institutions. The data obtained from the Education statistics annual abstract, 2008 E.C. (2015/16) revealed that the number has increased substantially from a total of 20,822 in the year 2004 E.C. (2011/12) to a total of 30,496 in the year 2008 E.C. (2015/16), which is a 46.5% increment over the period. Compared to preceding years' data, the current data (2008 E.C.) has been increased by 10.3% (MoE, 2017).



	Bachelors	DM/DVM	Masters	PhD	Speciality	Sub-Speciality	Others	Total
Male	7660	1159	14480	2728	276	100	118	26521
Female	1657	264	1745	253	34	6	21	3975
Total	9317	1423	16225	2981	310	106	139	30496

Figure 2.2: Gross human resource profile of Ethiopian higher education institutions by educational qualification and gender, 2008 E.C. /2015/16 A.Y

Source: Adapted from MoE (2017).

As shown in Figure 2.2 above, the majority of the academic staff working in the higher learning institutions are master's degree holders (16225) followed by bachelors (9317) and PhD holders (2981) without including the specialties and sub-specialties in the medical sciences. This aggregate figure includes both expatriate and academic staff working in the non-government institutions. Furthermore, the grand total academic staff regarding gender showed that 26,521 were males and 3,975 were females, indicating that the percentage of female academic staff is 13% of the total (MoE, 2017).

In terms of ownership, before 1991, private tertiary education institutions did not exist in Ethiopia (Yirdaw, 2016). However, since 1992, for-profit private and non-profit colleges and universities have been founded (Yirdaw, 2016). In terms of ownership, there are about 38 public universities and 98 non-governmental institutions in Ethiopia (MoE, 2017). With regards to leadership and governance, the Ethiopian Ministry of Education (MoE) is the one in charge of higher learning institutions in Ethiopia (Federal Democratic Republic of Ethiopia, 2009). The private higher education institutions are also closely observed by the same body through "it's lawfully sorted out office, Higher Education Relevance and Quality Agency (HERQA). As stipulated in Articles 71 and 72 of the Higher Education Proclamation (HEP) No. 650/2009 (Federal Democratic Republic of Ethiopia, 2009), private HEIs in Ethiopia are first accountable to the proper body as provided by its memorandum of association and bylaws. These governance instruments must be approved by the appropriate governing agencies to anchor licenses. Second, private HEIs are accountable to the MoE concerning the legitimacy of tasks in the delivery of education and research activities. Third, they should consent to orders issued by the MoE regarding student admittance. Fourth, they must ensure that leadership and management capabilities, location, premises, facilities, campus environment, levels of studies, student and staff numbers, and the nature of the programs meet all government requirements" (Yirdaw, 2016.p.2).

2.3.2.2. South African context

The current South African advanced education and the post-apartheid South African higher education has passed through a number of milestones during the last three decades into a democracy (Council on Higher Education (CHE), 2007; South Africa Council on Higher Education, 2004; South Africa Council on Higher Education, 2016). Following the fall of the apartheid regime, new initiatives were taken including the drafting and endorsement of "the South African Education White paper 3 of 1997". The sub-sector has gone through a rigorous change and transformation process of restructuring at both institutional and national levels since 1994 (Minister of Higher Education and Training, 2010), largely emanating from the "South African Education White paper 3 of the 1997" and the work of the "Ministerial Committee on Transformation and Social Cohesion and the Elimination of Discrimination in Public Higher Education of the 2008" (Preez, 2017).

In general and in the context of South Africa, higher education is presumed to play a key role in promoting the national economic, social, political and technological development in the country through inter alia quality learning and teaching, teaching professionalism in higher education, technology in support of research, learning and teaching and the overall increase in research outputs, access, participation, throughput and graduation rates as indicators of quality higher education (Republic of South Africa, 2012). In order to achieve these goals or execute these missions and ensure the sustainability of the higher education in the long-run, it needs to have qualified intellectuals, creative, competent and committed staff (Robyn & Du Preez, 2013).

The review of the early phases of the report on higher education change and transformation in South Africa by the Council of Higher Education a decade ago pinpointed five major issues which are believed to be recurring in today's South African higher education landscape: "public funding, governance, information and communication technologies, institutional culture, access, and change" (Council on Higher Education (CHE), 2007). Following these developments, various changes have occurred in the South African higher education landscape including agenda of transforming the racial profile of academic staff members working in the higher learning institutions with the goal of offsetting the perceived inequity in the sub-sector (Breetzke & Hedding, 2016). The sub-sector has also been operating under a multitude of challenges ranging from the quest for global competitiveness through internationalisation versus shaping the curriculum to meet the needs of the society in which they are operating; ensuring quality through institutional audits and quality enhancement projects for teaching and learning; developing infrastructure of historically disadvantaged institutions; granting allocation to enhance research; teaching and learning; and creating new higher education institutions (HEIs) (Singh, 2015). Others have also pinpointed that three key challenges are peculiar to the South African higher education context, namely "the sub-sector sector has to compete with industry to retain young skilled academics, ensuring that the next generation of academics possesses the teaching and learning capabilities that are essential to produce high-quality graduates and to enhance equity of opportunity and outcomes for students, and lastly it should make sure that the next generation of academics also has to contribute to the transformation of institutional cultures, especially at historically White institution" (Robyn & Du Preez, 2013, p.3).

The South African higher education sector consists of 26 public universities, (differentiated into eleven general academic universities, nine comprehensive universities and six universities of technology), as well as the National Institute for Humanities and Social Sciences (Department of Higher Education and Training, 2017, p.33). Though the number of private higher education institutions fluctuates depending on the economy, the accreditation status of programmes and compliance with regulations, the 2016/17 report revealed that there are about 125 registered private higher education institutions in the country (Department of Higher Education and Training, 2017, p.33). Three mechanisms underpin

and support the development of the public university sector in South Africa, namely planning, funding and quality assurance. The department of higher education and training steers the system through funding and planning oversight, while the Council on Higher Education (CHE) has the mandate to quality assurance of the system. The National Student Financial Aid Scheme (NSFAS) provides funding for financially needy, academically qualifying students in obtaining access to university education (Department of Higher Education and Training, 2017, p.33).

In the 2015 academic year, the audited headcount enrolment at public higher education institutions (universities) in South Africa totaled 985212 which incorporates both full-time and part-time enrolments for contact and distance learning studies (See Figure a).

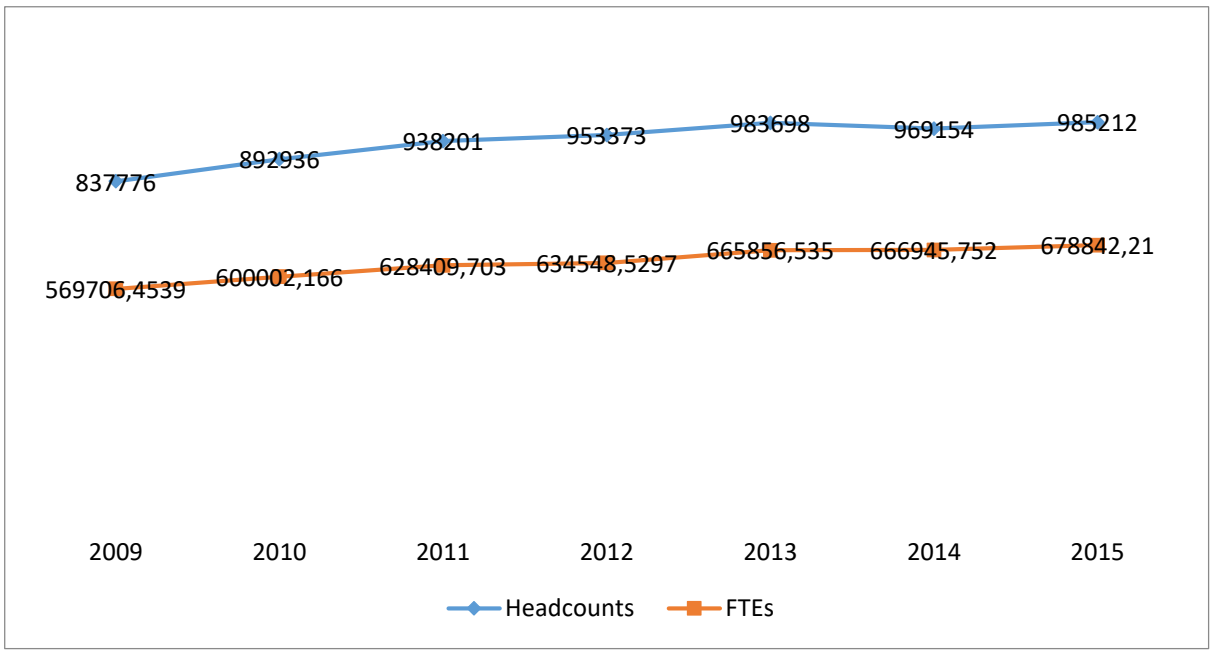


Figure 2.3: Enrolments (Headcounts and FTEs) (HEMIS, 2015)

As shown in Figure 2.3 above, the number has increased by close to 18% over the seven years period from 2009 to 2015 which was lower than that to reach the national target of 1.6 million students by 2030 as stipulated in the National Development Plan (NDP) (Department of Higher Education and Training, 2017:33). The fundamental reason for below target performance during 2015 was claimed to be that the system remained financially vulnerable and constrained to meet such a target.

When it comes to funding, the South African tertiary institutions have three major sources of funding or income. Overall, the government takes the lion share as a source of income for most of the universities with the exception of a few universities where private income and student fees surplus the movement funds (See Figure 2.4).

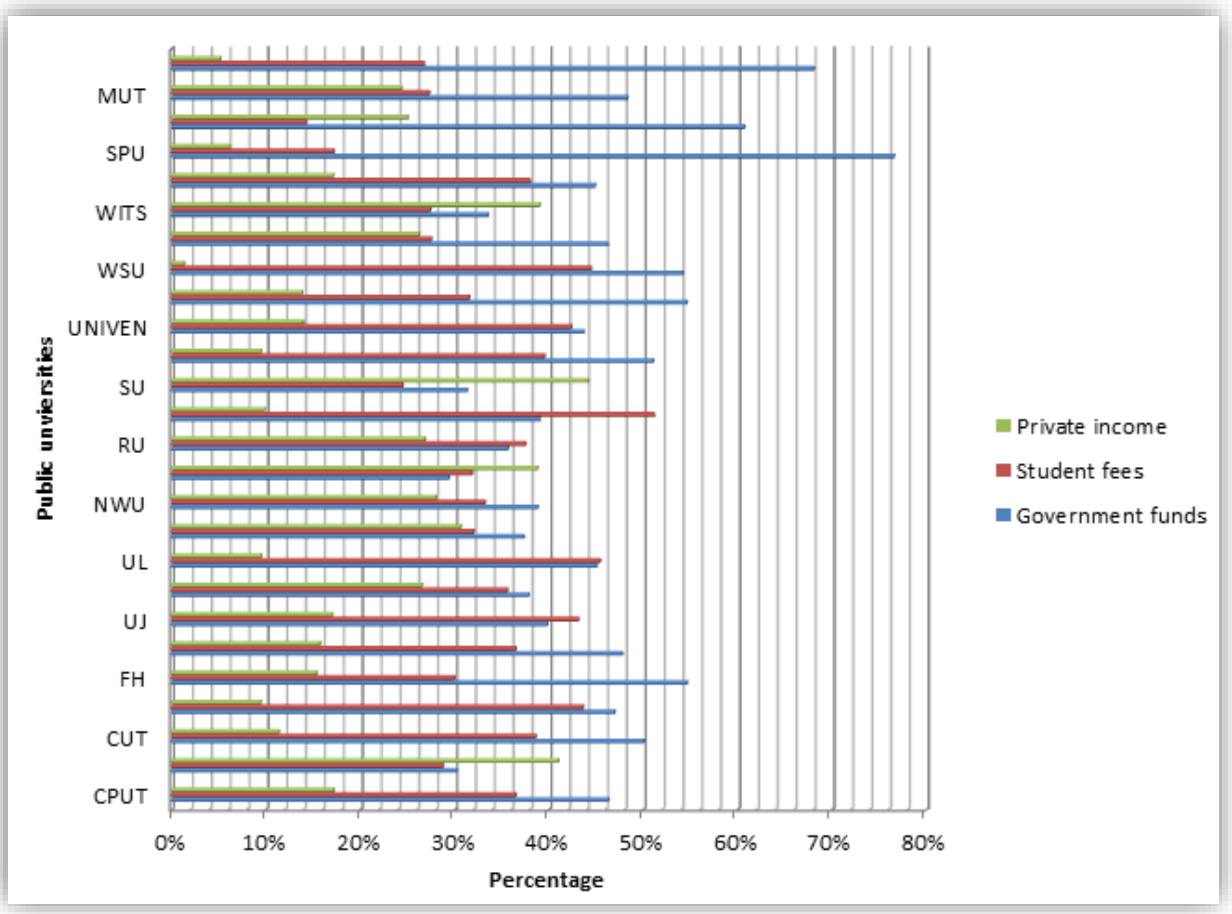
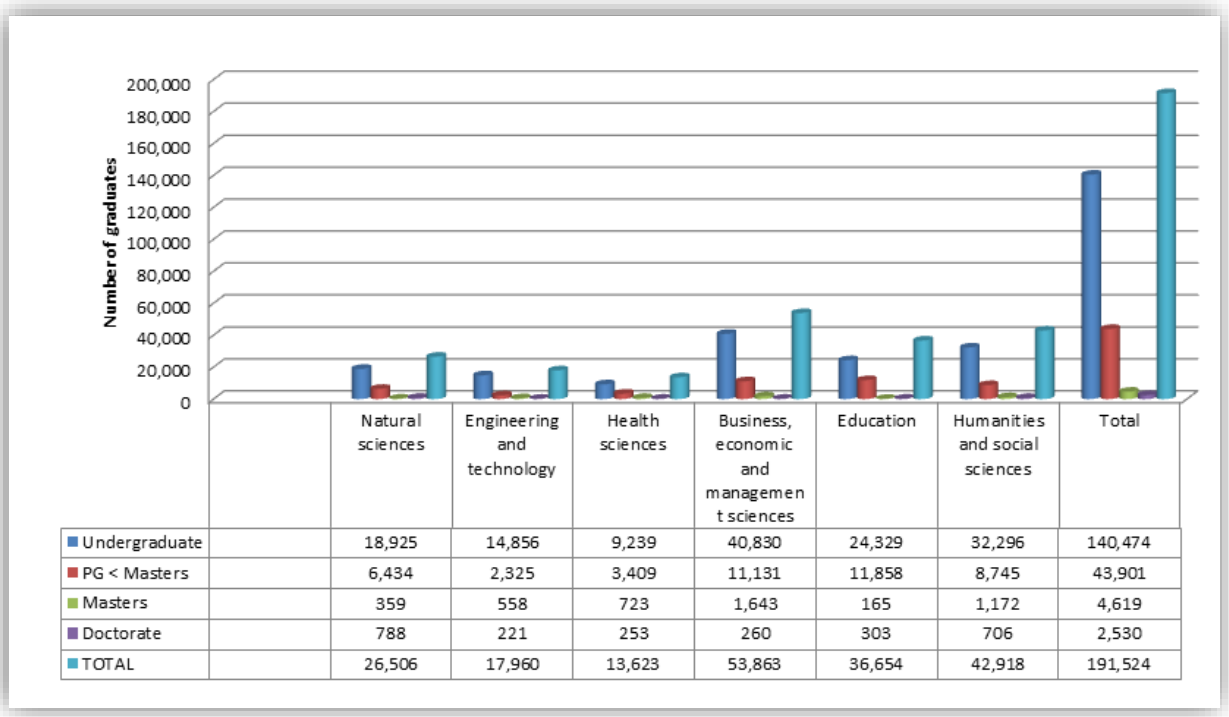


Figure 2.4: Income sources across South African universities, 2015

Source: HEMIS (2015)

As shown in Figure 2.4 above, data obtained from secondary sources for the year 2015 revealed that almost all South African public universities obtain funds from three different sources, namely private income, student fees, and government funds. The amount of income obtained from each source varies. For instance, the government source is dominant in the newly established institutions such as the University of Zululand, Sol Plaatje University, University of Mpumalanga, Mangosuthu University of Technology, Sefako Makgatho Health Science University, etc. whereas the private income is dominant in selected universities such as the University of Pretoria, University of Stellenbosch, University of Witwatersrand, and University of Cape Town. However, a few universities generate a major source of income from student fees including the University of Johannesburg, Rhodes University, and the University of South Africa.

With respect to the output, the total number of university graduates produced per annum has increased to 191524, which exceeded the expected target of 181616 for the 2015 academic year by 9908 graduates (Department of Higher Education and Training, 2017, p.34).



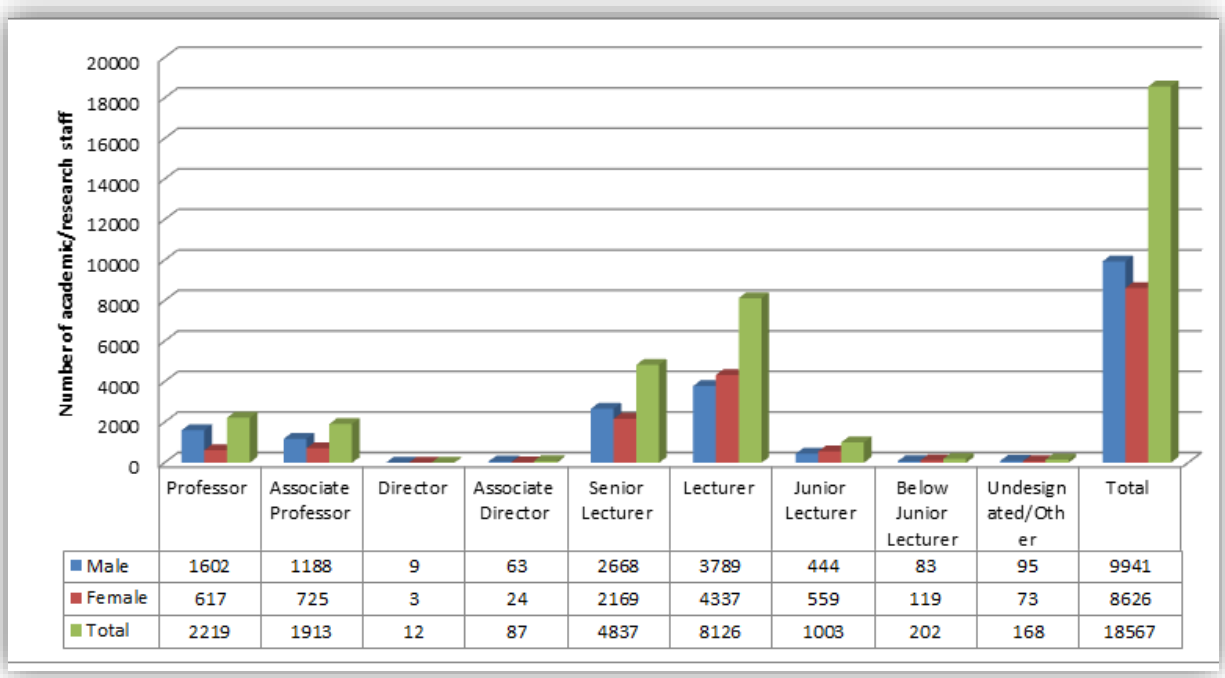
		Natural sciences	Engineering and technology	Health sciences	Business, economic and management sciences	Education	Humanities and social sciences	Total
Undergraduate		18,925	14,856	9,239	40,830	24,329	32,296	140,474
PG < Masters		6,434	2,325	3,409	11,131	11,858	8,745	43,901
Masters		359	558	723	1,643	165	1,172	4,619
Doctorate		788	221	253	260	303	706	2,530
TOTAL		26,506	17,960	13,623	53,863	36,654	42,918	191,524

Figure 2.5: Graduates by major fields of study (2015)

Source: HEMIS (2015)

As shown in Figure 2.5 above, the highest number of graduates was from the fields of business, economic and management sciences (53,863) and the lowest from the fields of health sciences. When evaluated from the education perspective, the highest number of graduates was the undergraduate level (140,474) whereas the lowest was for doctorate degrees. The opening of three new universities such as the Sol Plaatje University (SPU), the University of Mpumalanga (UMP) back in 2014 and the Safako Makgatho Health Sciences University on 1 June 2015 was part of the higher education expansion projects aimed at ensuring enhanced access to university education in all provinces in the country (Department of Higher Education and Training, 2017:34). Currently, there are 26 public universities in South Africa, each with quite a different background and level of operation. Some of the universities are engaging in generating knowledge extensively whereas others are merely teaching universities.

Human resource capacity development is another key issue in the South African higher education. The following figure shows the number of academic/research staff across South African universities during 2015.



	Professor	Associate Professor	Director	Associate Director	Senior Lecturer	Lecturer	Junior Lecturer	Below Junior Lecturer	Undesignated/Other	Total
Male	1602	1188	9	63	2668	3789	444	83	95	9941
Female	617	725	3	24	2169	4337	559	119	73	8626
Total	2219	1913	12	87	4837	8126	1003	202	168	18567

Figure 2.6: Academic staff by gender and rank, 2015

Source: HEMIS (2015)

As shown in Figure 2.6 above, out of the total of 18567 academic staff members, 9941 (53.54%) were male and 8626 (46.46%) female. When viewed from the academic rank perspective, the majority of the academic/research staff were working in the rank of lecturer (43.77%) followed by senior lecturers (26.05%). Moreover, the proportion of academics with the rank of professors working across all the South African higher learning institutions accounted for about 11.95% whereas associate professors accounted for a similar amount of 10.30%. On the contrary, the number of developmental juniors, under junior and undesignated/other accounted for less than 7% of the academic/research workforce.

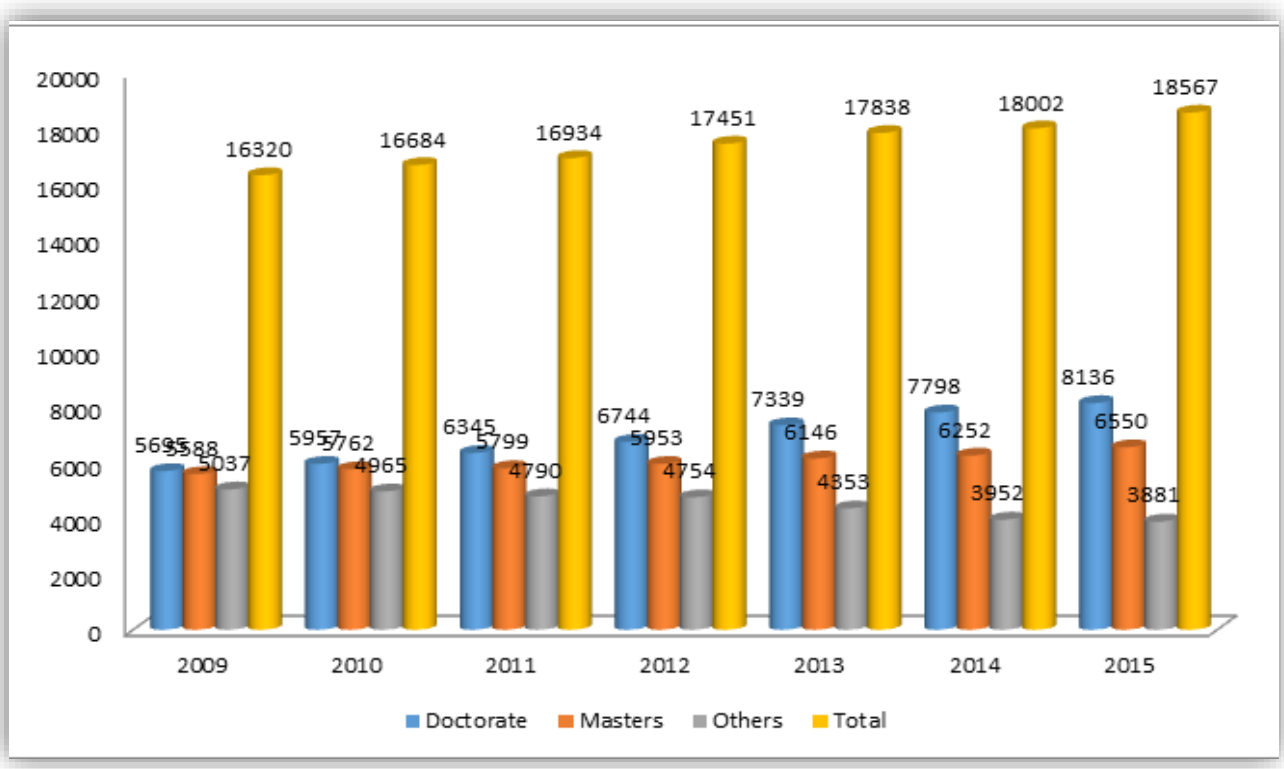


Figure 2.7: Academic staff by qualification: Doctors, Masters, Other

Source: HEMIS (2015)

As shown in Figure 2.7, the total number of academic staff members has increased from 16320 in 2009 to 18567 in 2015. Similarly, the number of PhD holders has increased steadily over the seven years along with the master's degree holders. The highest number of PhD holders was registered in 2015 and the lowest was registered in 2009. Figure 2.8 below shows the number of research publications by all South African Universities over the last seven years (2009-2017).

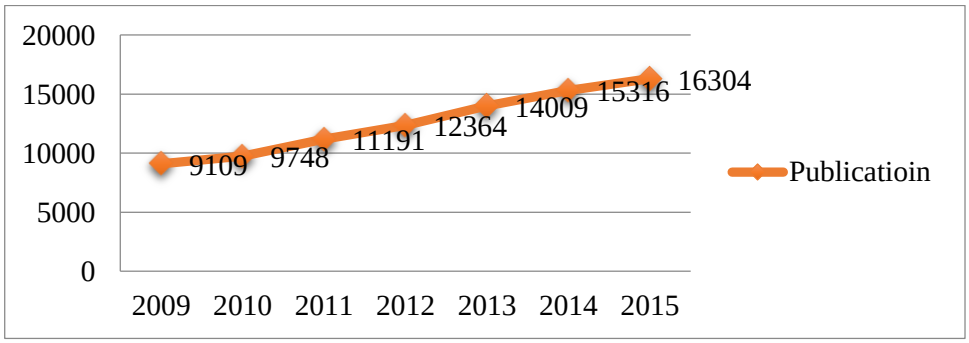


Figure 2.8: Number of research publications (2009-2015)

Source: HEMIS (2015)

As shown in Figure 2.8, the research performance or publication outputs across all the universities in South Africa for seven consecutive years revealed that there is a steady increase from time to time. For instance, between 2009 and 2015, the number of research publications increased by 87%. In 2009, only four universities were able to publish more than a thousand articles per institution whereas in the year 2015 about eight universities were able to publish more than a thousand articles with a 50% increase in the number of universities which surpass one thousand (see Figure 2.9 below).

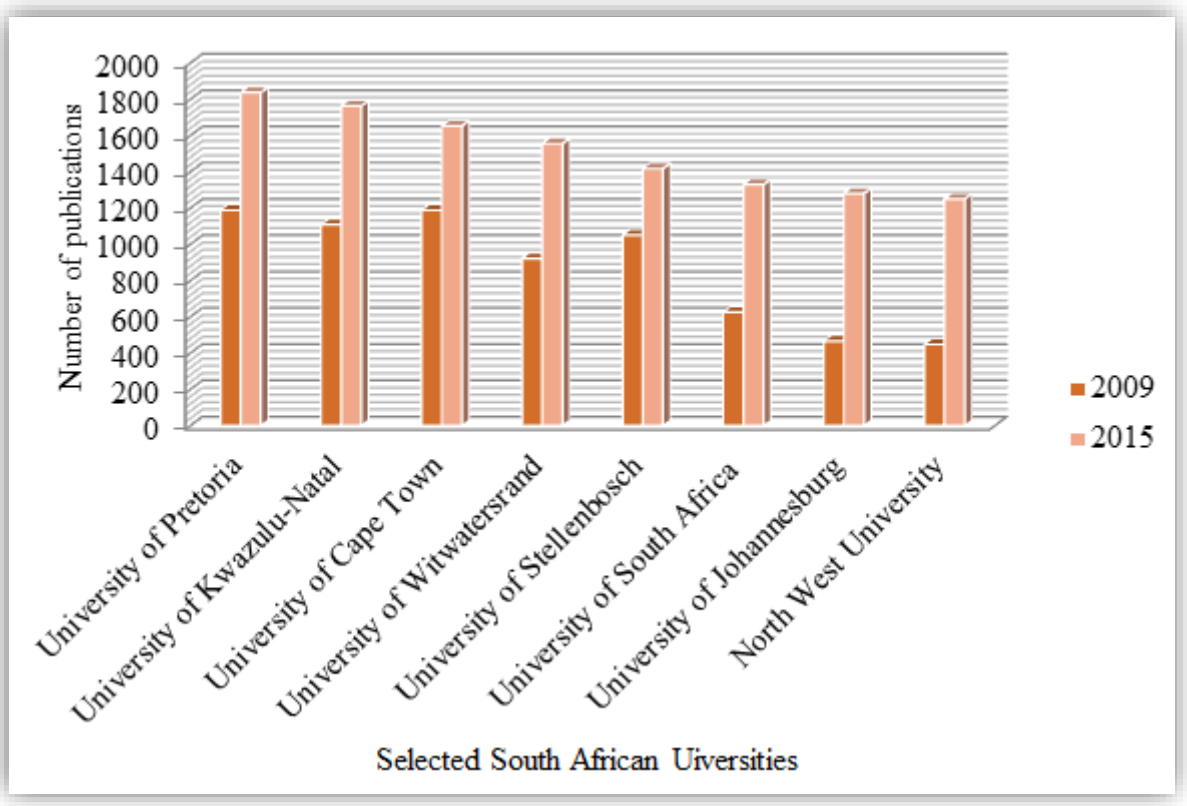


Figure 2.9: Universities with the highest research output

Source: HEMIS (2015)

2.4. CHALLENGES AND OPPORTUNITIES CONFRONTING SSA HIGHER EDUCATION INSTITUTIONS

African universities are operating under a highly constrained environment which affects their growth and development, competitiveness and sustainability in the face of the globalised world. Prominent scholars in the area of higher education anticipated the likely issues and challenges ahead of most of African higher learning institutions at the beginning of the 21st century, highlighting the fact that African higher education is operating under both local and global constraints to accomplish its mandates (Teferra & Altbach, 2004). The authors identified issues related to "access, governance, the role of research and publishing, information technology, the academic profession, the 'brain drain' and migration of and others as key challenges at the heart of Africa's future academic development"

(Teferra & Altbach, 2004). In addition, Mushemeza (2016) identified some of the key challenges facing the sub-sector, including "funding (enhancement of financial base and sustainability), infrastructural demands, inadequate staff remuneration, high student enrolment with low staff-student ratio, and governance/management deficits" (Mushemeza, 2016, p.236).

A study in the context of Ethiopian higher education revealed the following key challenges impeding the growth and development of the sub-sector: funding, staffing, teaching practices, research and community services, quality assurance and gender issues (Deuren, Woldie, & Wondimu, 2016). The authors pinpointed that benefiting from the fruits of high enrolment and higher education expansion in Ethiopia is largely difficult if not impossible without critically addressing the described challenges.

A study based on selected South African universities revealed that retaining highly qualified and experienced academic staff is one of the key challenges facing the selected universities in the country. Some of the influencing factors for the departure of academic staff can be attributed to the lack of job satisfaction due to meagre payment, poor career growth, few opportunities for academic development, poor working conditions, heavy workload, making it difficult to meet promotion requirements and poor mentoring and capacity development (Selesho & Naile, 2014). The need for realising the change in institutional culture as a result of the change in the status of the higher education institutions due to mergers of different universities emanating from the institutional transformation agenda to tackle inequity and increasing research outputs are some of the key challenges facing some South African Universities (Morka & Hay, 2009). Another subject of debate in contemporary South Africa higher education landscape between the government, the management of universities and the society at large is the issue of provision of free higher education by the state (Mlambo, Hlongwa, & Mubecua, 2018). While a certain segment of the society raises the issue related to the source of money to finance the free higher education raising concerns over the very slow economic growth of the country, decreasing tax collection and increasing unemployment in the country, others question the feasibility and long-term sustainability of such an endeavour (Mlambo et al., 2018). The author argued that the limited number of students in the country (only 26 universities) to provide access to the majority of the cohorts is the key challenge ahead of the South African higher education landscape amidst provision of free higher education (Mlambo et al., 2018).

The following sub-sections, therefore, are aimed at investigating the key challenges facing sub-Saharan African higher learning institutions in general and the respective countries under study in particular. The first of these sub-sections examines leadership-related challenges facing the sub-sector based on previous studies.

2.4.1. Leadership and governance

Some studies argued that leadership is among the key challenges confronting higher learning institutions in Africa. According to Muriisa (2014, p.88), the principal challenges confronting African higher education are associated with putting their homes in order, instituting effective management, developing and nurturing strategic plans, resisting political interference, frequently re-examining themselves, investing in quality issues, and practically imagining in national development issues. The author suggested that universities should be structured and organised in a manner that allows unhindered scholarship and knowledge generation (Muriisa, 2014). This largely calls for a responsive, discretional and symbolic role played by leadership so as to enhance the scholarship and performance of the higher education sector in the continent (Muriisa, 2014). The author identified two key challenges facing the sub-sector in Africa such as the lack of skilled manpower and leadership due to reasons ranging from brain drain to brain circulation or moonlighting which makes it difficult, if not impossible, for African universities to effectively confront these persistent challenges (Muriisa, 2014). According to McCowan (2018), governance (organisational structures and stakeholder participation) is among the three key types of barriers identified for the enhancement of quality higher education as well as resources (staffing and infrastructure) and pedagogical culture (social hierarchies and approaches to teaching, curriculum, and assessment) (McCowan, 2018).

Furthermore, there has been a changing focus by universities from research-based training to market-based vocational teaching; from research for the sake of knowledge to commissioned research and short-term consultancies; and from community services to internship and student placements (Muriisa, 2014). This change of direction impacts the performance and sustainability of higher education and it needs to be curbed to retrace their steps to bring them back on course. In order to reposition the higher education in terms of executing its tripartite mandate that is teaching, research and community services, the role of leadership is very critical without which there will be a missing link for effective and visionary performance of universities (Muriisa, 2014). It is thus recommended that universities' performance may not improve until leadership has improved.

2.4.2. Funding

The sustainably of higher education, among others, is highly dependent on its financial resources. The scarcity of financial resources is currently hitting most of the Sub-Saharan African universities hard and thus impacting their ability to deliver their mission of the "teaching-learning, research and community services". The issue of finance has become the centre of conflict in most of the African universities and especially in the South African landscape with the #FeesMustFall movement which was started in 2015 with a wider global student support across the world. Although many countries are already committing quite a large sum of their national budget to education and a sizable

(disproportionate) amount of this to higher education, the sub-sector in Sub-Saharan Africa is characterised by inadequate funding or financing (Teferra, 2013). For many years, a university was considered as an expensive business that does not warrant investment by many international financial institutions, including the IMF and the World Bank. The funding policy framework issued by these international financial institutions has influenced many African governments to the extent of channeling their energy and resources to primary and secondary education, abandoning the higher education sub-sector. The policy framework has created the kind of perception among most of the African governments that higher education is "costly and competes unfairly with other educational sub-sectors, particularly primary education" (Teferra, 2013, p.45). This perception has had a significantly negative influence on the amount of funds allocated to the higher education sector in many African countries – to the extent of challenging and threatening the very existence and sustainability of these universities. However, this move has had unprecedented consequences in the operation of the higher education sub-sector in SSA which has led to a decline in the quality of education and the exodus of highly qualified academics to countries in the Northern hemisphere. For instance, in Ghana, a decline in funding was witnessed at the beginning of the 21st century. The attention given to the higher education sub-sector was relatively minimal and the real value of government funding for universities over years had fallen below levels required to sustain institutions (Braimah, 2004).

Although the World Bank has recently changed its approach towards higher education in SSA, its past policies have retarded the healthy growth of higher education in the region (Tilak, 2011). Today, higher education is considered by the World Bank as one of the key sectors to accelerate development and innovation in the continent almost a direct contrast from the previous stance that resulted in Africans not focusing on higher education but on the school sector – the implication being that Africa was never going to fully develop (MacGregor, 2015; Tilak, 2011).

More specifically, one of the major financing challenges facing the SSA countries is that "enrolment in higher education has grown faster than financing capabilities, reaching a critical stage where the lack of resources has led to a severe decline in the quality of instruction and in the capacity to reorient focus and to innovate" (World Bank, 2010, p. xiv). Higher education in SSA is at a stage where public funding is not sufficient to address the overwhelmingly high demand for access on one hand, and on the other hand to offering a level of quality that provides the students with the necessary competence to equip them for the current and future labour markets (World Bank, 2010, p. xiv). The laissez-faire approach to expansionism driven by supply-side pressures, which is evident in some countries like Ethiopia, will only lead to even further deterioration (World Bank, 2010). The higher education funding is largely influenced by external factors and some" obstructive internal policies" in which case

the ministry of finance rules in many countries dictate that institutions return unutilised or self-generated resources, though this is changing, albeit slowly (Teferra, 2013, p.47).

In order to overcome the financial challenges, most of the universities in Africa are adopting different strategies ranging from striving to become entrepreneurial universities, expansion of private higher education, introducing cost-sharing programmes accompanied by student loans and financial aid for low-income students (World Bank, 2010). In addition, initiatives such as reforms to improve internal efficiency have been implemented, lower cost and more effective delivery alternatives have been adopted and governments are increasingly adopting more effective budget management practices (World Bank, 2010). However, much care should be taken when implementing these policies so that the negative effects of the policies are controlled and that not only the financial gains but also the academic gains are maximised (Tilak, 2011). Teferra (2013) recommended that such a move needs to be undertaken actively, selectively and carefully taking into account the local, national, regional and international realities emphasising that academic institutions balance their academic duties with entrepreneurship.

Moreover, in the effort of implementing policies, African countries need to discover, develop, profoundly examine and embrace a policy that best fits their unique circumstances (Tilak, 2011). Yet, the region in general remains the most 'backward' region in the world, in terms of the development of higher education (Tilak, 2011). The increasing social demand for higher education and pressures for the expansion and 'massification' of higher education have to be met seriously with sound arrangements for higher education, and similarly solid strategies for financing higher education (Tilak, 2011).

In some countries, the public funding is regressing in the hope of the system resourcing itself, with dangerous consequences looming such as what the University of Makerere in Uganda faced when the government reduced its support with the presumption that the university will finance itself via increased enrolment that has a bearing on the quality of education (Teferra, 2013). The lack of sufficient funds by SSA universities has had a visible and direct impact on the quality of education which depends on the ability of the university to attract and retain highly qualified academic staff, having a cutting-edge infrastructure to engage in research activities, an enabling working environment for the employees including modest offices and the overall operation of the university system.

Although it may vary from country to country, universities have three major sources of funding including student fees, the government, and those from the private/non-profit organisations. With the exception of some world class South African universities, most of the universities in the SSA get the major portion of their funds from the government which has a serious implication on the autonomy of these universities. The one who pays is the one who sets the directions and controls the institutions. If

the government is the largest source of funding, it means that the government has a vested interest in the institution. Those that are able to generate their own funds are relatively free to exercise their autonomy. Researchers such as Tilak (2011) argued that public financing of higher education is indeed the most viable option available for African universities in order to develop strong and vibrant higher education systems. All other sources of funds are only supplementary. In as much as universities expect to see that the size of public resources devoted to higher education is increased, they also need to work hard to make use of the already existing resources (Tilak, 2011).

In short, "the severe limitations of resources and their impact on teaching, research and learning conditions have contributed to lowering the level of staff and student motivation. They have negatively impacted on curriculum development, the governance of the university and university life, the principles and practice of academic freedom, the capacity to hire, retain, and renew the teaching staff. They have created environments where routines of bare minimum in performing the respective tasks have become the norm, and which often shut off innovative impulses" (Assie-Lumumba, 2006, p.10). Furthermore, the quantity, nature, and sources of the financial resources for African higher education institutions inevitably have major consequences for the learning and intellectual output, and the limitations of the production of knowledge and access to publications and this has "often led to what has been referred to as 'the book famine' as the material intellectual base has been eroded, with decaying libraries, hence difficult intellectual production and low output" (Assie-Lumumba, 2006, p.10). This shows that funding has bearing implications on African higher learning institutions.

2.4.2. Deteriorated infrastructure

As much as expansion is taking place in most African universities, there are facilities that are extremely deteriorated due to the limited capacity to accommodate the high student population. In many universities, the intake capacity is much less than the actual number of students enrolled in the university system. Lecture halls are full and too crowded. Office facilities and facilities such as toilets, water supply, and electricity are still a problem in some of the African countries. Moreover, continuous power interruptions are causing damage to very expensive facilities such as laboratory equipment. Academics are highly constrained to engage in a cutting-edge research that makes the universities visible on the global stage, which is impacting the upward career mobility of the academic staff members especially in the areas of science and technology for which research depends extensively on laboratory facilities. The lack of proper infrastructure is cited as one of the reasons for the departure of the elite and experienced faculty members from the higher education sector to other parts of the world. A recent study in one of the Ugandan University teaching hospitals revealed that a significant number of respondents indicated that poor infrastructure has contributed to brain drain (Wakida, 2015). Another study in one of the Ethiopian public universities indicated that a "bad working environment" manifested in the form of the lack of good facilities such as "offices, chairs, computers, internet and

proper toilet facilities" were cited as the main reasons for the propensity of academic staff to depart from their institutions (Ibrahim et al., 2017). With increasing global competition with consumer-oriented tendency of the students there is a growing need to improve facilities and infrastructure to offer cutting-edge educational services and more flexible delivery options for the students. But, the continuous decline of income sources coupled with the persistently hiking costs of commodities is making infrastructure development a big challenge particularly in the SSA countries. With respect to ICT facilities, studies shows that ICT resources are poor or virtually non-existent in SSA universities, with 80% of the region's universities inadequately connected (Mutula, 2009).

2.4.3. Brain drain

Boyo (2013) emphasised that the departure of trained Africans to the global north countries is rooted in a historical context of 'slavery' and 'colonialism'. The author further asserted that the impact of brain drain in Africa is not only explained through the cost-benefit analysis related to remittances or loss of investments, as most of the scholars used to approach the discourse, highlighting that brain drain has significant social impacts on African immigrants in the diaspora too. This study deviates from most of the arguments in that it focuses on exploring some of the triumphs and challenges of immigration via the perspective of the migrants. The author emphasised that brain drain should be understood beyond its impact on both the source and destination countries and it shouldn't be considered as a mere movement of 'brains' from one place to another – rather, it is the movement of social beings from one particular context to another carrying its [people] own history, stories, memories, dreams, and aspirations (Boyo, 2013). Apart from historical injustices, the author contended that the brain drain has a social effect on the immigrants themselves in the diaspora. Despite the diversification of Africa and the variation in terms of the magnitude of brain drain, this study has assumed that Africa as a whole is suffering from a similar underlying problem of brain drain to the west (Boyo, 2013). One of the limitations of the study is the tendency to make broad generalisations, which in some ways is unavoidable given the fragmented state of national statistics and literature on and from African countries (Boyo, 2013). Also, the literature uses a number of terms to describe migrants without excluding others: "(highly) skilled migrants", "(highly) educated migrants", "professionals" and "talent". The terms are used interchangeably throughout the thesis. Similarly, the terms "home country" and "source country" refer to the country that the migrant comes from a while, "host country" and "destination country" refer to the country that the migrant emigrates to (Boyo, 2013).

Furthermore, Tessema (2010) explicated that despite the scarcity of highly skilled workers in many least developed countries (LDCs), 'human capital flight' or 'brain drain' is becoming a common phenomenon. The author examined the causes, challenges, and prospects of the phenomenon of the brain drain in LDCs by taking Eritrea as a case study. He demonstrated that "deteriorating economic

conditions, lack good governance and political instability are the root causes of the 'brain drain' in LDCs such as Eritrea"(Tessema, 2010, p.131).

2.4.4. Aging academics

Aging academics (experienced academics) and the lack of readily available young academics to fill the vacant posts is another key challenge facing most of African higher learning institutions (Teferra, 2016). In this line, new initiatives are urgently needed to build a future cadre of academics and leaders in African universities; the current staff are aging very fast, with no corresponding expansion in young qualified scholars to take their place. For instance, in the context of South African universities, the majority of the academic staff in the higher positions are held by either Indian or White professors and the majority of them are likely to retire from the sector over the coming five to ten (anecdotal evidence) years. On the other hand, there is a tendency by the government of South Africa to transform the racial profile of academic staff in these universities to ensure equity in the profile of academic staff in the higher education in the way that it reflects the demographic profile of the nation (Breetzke & Hedding, 2016). As a strategy to ensure this, the government has provided a privilege to hire Black South Africans through designated employment which excludes the rest of the South African academics to be employed regardless of their interest in getting employed in those universities. The number of Black South African postgraduate students graduating from these universities to be a candidate for the posts is low, even if they can be employed in government enterprises or other private sectors at a lucrative salary. This phenomenon has created a staff profile in the sector with the likely shortage of qualified and established academics with terminal degrees putting the sustainability of the universities at stake. There is also a widespread debate among scholars and policymakers regarding the likely effect of affirmative action on the level of excellence of the institutions to remain competiitve and sustianble. The overall effect of such a move may also disappoint the White and Indian South Africans and force them to look for alternative employment in other sectors in the country or to seek for alternative long-term employment in the global north countries, especially in the OECD economies. This will likely have a negative effect on the overall human resource development of South African universities in the long term and it may force them to rely on professors coming from other parts of Africa and the rest of the world. The other likely outcome of the phenomena is that the universities will have very few profiled senior faculty members at the top with high staff count in the middle and very thin footings at the bottom. With the retirement of these senior faculty members, the long-term sustainably of these universities will be at stake.

2.4.5. Student-staff ratio

It is difficult to determine the optimal level of student-staff ratio in the higher education institutions in Africa as it may vary from country to country due to a number of factors such as some of the

universities are largely research led whereas others are purely teaching universities (Tilak, 2011). The challenge arises from the fact that all students may not attend classes on a full-time basis and hence the acutal number of students enrolled in the unviersity may be less than the number of students attending classes (MoE, 2017). Regardless of the difficulty to judge the institutions purely on the basis of the sutdent-staff ratio, its signficance in predicting the cost as well as the quality of education cannot be preculuded or undermined (Tilak, 2011). The ratio definitely varies across countries, insitituios and often disciplinese. For instance, the staff-student ratio in Ethiopian higher learning institutions varied acorss public versus private insitutions. In the academic year 2015/2016, the student-staff ratio for the undergraduate degree programmes was 19.6 for government instituions whereas it was slightly higer (24) for private or non-government instituions with an average ratio of 20.1(MoE, 2017). In the context of South Africa, the student staff ratio flucturated slightly between 26 and 27 over a period of six years from 2011 to 2016 (Dipert, 2017). This aggregate figure, however, is illusive as it does not differentiate between the disciplines since the level of engagement and interaction needed between the students and the staff may vary across disciplines (for instance, in the areas of heealth, engineering and others).

2.4.7. Commercialisation of higher education

The recent perception by many that higher education is a commodity is also another challenge facing the sub-sector. A recent report has indicated that Australia generated income through higher education – this has implications for the governance system and quality of education as higher education is increasingly commercialised across the globe adopting a business model of leadership (collegial versus a managerial approach to leadership and governance).

2.4.8. Massification and expansion of HE

Based on the philosophy of equity in education, most of the countries are advised to expand the higher education sector in their countries with the objective of opening up access and creating opportunities for all the citizens. The secondary data obtained from UNESCO indicated that the enrolment rate in most African countries has increased exponentially. However, the increase is not significant enough to accommodate or off-set the total young generation who ought to enrol in higher education. Thus, regarding this, the researcher sought to identify or highlight the enrolment rate of universities across SSA and its comparison with the rest of the world on the basis of secondary data. The following diagram indicates the enrolment trend in selected SSA countries.

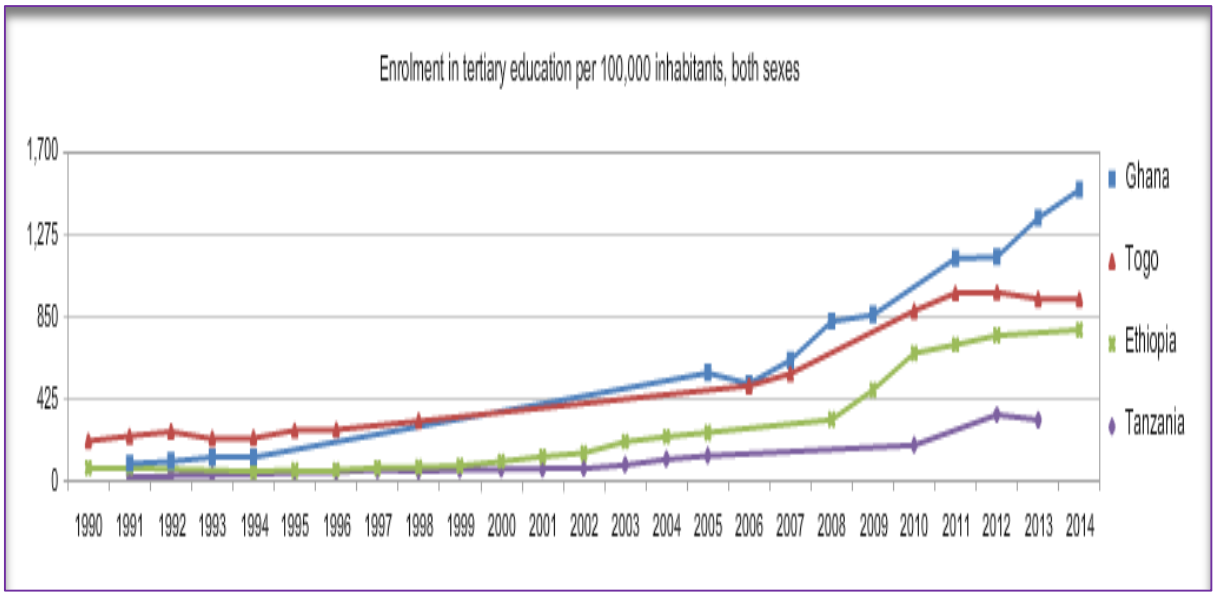


Figure 2.10: Enrolment trend (in numbers) from 1990 to 2015

Source: https://www.statsilk.com/maps/statplanet-world-bank-app-open-data/?y=1990-2015

As shown in the Figure 2.10 above, the enrolment in tertiary education per 100,000 inhabitants has increased for both sexes in Ethiopia from less than 425 in 1990 to close to 850 in the year 2015. This shows an improvement by itself but not significant enough to meet the demand of the Ethiopian young population of which 65% is the youth. Overall, the highest enrolment per 100,000 inhabitants was registered in Ghana followed by Togo and Ethiopia and Tanzania. The enrolment trend in the selected countries has increased over time which is a positive sign in terms of improving entry to higher learning institutions, particularly in a historically deprived region due to political turmoil and civil war.

2.4.9. Retention and attraction of talents

Talent is the key driver of development and a critical resource necessary for enhancing national competitiveness and advancement of a nation (Ming Yu, Hoi Piew, & Kuk Fai, 2014). Besides 'debt crisis', the 'talent' crisis' remains one of the most widely recognised challenges facing global leaders. Among others, academics are found to be the most mobile species in search of better opportunities either through brain drain or networking (Ming Yu et al., 2014). From this statement, it is clear that there is a "war for global talent" particularly among higher learning institutions and the mobility is largely from the less developed to the more advanced economies. The tertiary education sector's share of the SSA is very low compared to the global standard (Tilak, 2011). There has been a growing trend in the student enrolment in the region and the sector is also expanding at an alarming rate. During the early 1970s, for instance in Ethiopia, the number of students enrolled in the higher education sub-sector was extremely low compared to today's increasing trend. For example, in the early 1970s there were only three whereas today there are about 42 public universities and a significant number of private

colleges and universities. The reason for such increment is because the country is relatively stable and peaceful and most of the families believe that education is one of the means to livelihood for a better life and living conditions. That, in addition to the government effort to explain the higher education infrastructure, is why the enrolment has increased

This booming number of universities is not well planned in terms of ensuring better working conditions for both staff members and students as most of those universities are still undergoing infrastructural development. These poor working conditions due to the absence of sufficient infrastructure and facilities, coupled with poor pay and the increasing number of students in the class, have made the higher education work become less attractive to academics. The trend now has changed because the industry has become much more attractive in terms of pay than the higher education sector which has forced top scoring students to join the industry instead of higher education which was not the case during the early periods. Those who enjoy academics and remain in the sector are also leaving because of the declining trend of academic freedom and intellectualism in the sector due to the state involvement in the affairs of the universities.

The ability of universities to be pro-active and to attract and retain their employees largely determines their success in terms of having highly profiled and qualified academics in the future. It is hardly possible to think of universities without well-established and productive academics in the context of the South African universities. It is possible to say the future of the South African higher education largely depends on its qualified staff and if universities due to various reasons are letting their professors leave the universities for other organisations or abroad, the sustainability of the university will be at stake given the poor succession planning.

2.4.10. Misalignment (mismatch) of the skills and knowledge

The relevance of higher education is being questioned these days as there is a misalignment between what the graduates acquire from the university and what the labour market demands. Evidence indicated that the talent crisis facing the world may not emerge from talent shortage in the labour market but rather from ‘skill gaps’ or ‘mismatch’ (Ming Yu et al., 2014). This has wider policy and regulatory implications for the higher education leaders in SSA Africa in general and the specific universities in particular.

2.4.11. Equity and access to higher education in SSA

Fairness and access is also another major challenge facing SSA higher education. Scholars argue that massification of tertiary education may not necessarily lead to a fair distribution of higher education. According to Darvas, Ballal, and Feda (2014), SSA countries are still by far lagging behind other regions in terms of equity. The report generated by the authors reflected that increased enrolment itself

may not lead to equitable access to higher education. This implies that more effective policies are required so that it is possible to attain the high-level objectives of higher education, including its contribution to competitiveness and prosperity (Darvas et al., 2014). In addition, Molla (2014) strongly believes that involvement in Ethiopian higher education is far from 'mass' and can be reasonably designated as 'elite', indicating that disparity in admission and achievement in HE as a serious issue. Despite the government effort to expand the sub-sector through the support of neo-liberal institutions such as the World Bank and IMF, access to higher education in Ethiopia is still lagging far behind regional standards.

2.4.12. Evolving functions of higher education

The functions of higher learning institutions has remained at the centre of the tertiary education policy discourse over many decades and has remained on the top of advanced education policy agenda to date. Some argue that it is too simplistic to state that the functions of universities are limited to the three mandates, namely teaching, research and service, highlighting that "the university has a series of functions related to production (such as selection of talents, training and research); to consumption (such as general education, community life and a holding operation); and to citizenship (such as socialisation, critical evaluations and democratisation)"(Cloete & Maassen, 2015, p.2;Clark, 1991, pp.47-67). The complexity of the functions of higher learning institutions in a society has increased with the advent of ICT, globalisation and emergence of the fourth industrial revolution which forces universities to remain entrepreneurial (Guerrero, Kirby, & Urbano, 2006).

2.4.13. Weak research development

Most of SSA higher learning institutions with the exception of some South and North African Universities exhibit poor research development and low research productivity. A number of factors have contributed to such poor performance in the areas of research and scholarship. A study conducted with respondents from the Haramaya University of Ethiopia revealed some of the key challenges academics are facing when it comes to research and publishing scholarship (Dessie & Mesfin, 2013). The finding revealed that the challenges/problems are the lack of a conducive infrastructure and environment, shortage or scarcity of time, lack of a research-tailored policy, lack of effective institutional research management system, lack of academic remuneration, challenges related to publications (e.g., less preference of journals from developing countries on international journals, prohibitive costs and language barriers), access to internet, and lack of senior expert for mentoring (Dessie & Mesfin, 2013).

Mutula (2009, p.2) stated that "although African universities have been known to suffer from various constraints that affect the quality of research and learning, the ranking of universities has ruffled some

egos, especially because of the impact such ranking could have on resource allocation and attracting students and staff in a globalised competitive environment". Despite the criteria used by the ranking institutions which put African higher learning institutions at a disadvantage, the weak performance of African higher learning institutions in the international arena, particularly with respect to research, is aggravated by the weakness of the universities to offer PhD programmes (Mutula, 2009). Without undermining the factors related to the skill gaps of the candidates, the slow rate of completion of PhD programmes in most of African universities, which may take on average six to eight years, emerged from the lack of adequate resources and facilities and the inherent bureaucratic nature of the institutions in the approval process (Mutula, 2009). As a result of the lack of a sufficient number of qualified faculty members and supervisors, most PhD programmes in Africa are limited to the dissertation alone without including coursework and other necessary comprehensive examinations that largely enhance the capacity and capability of the graduates as well as the sustainability of the PhD programmes (Mutula, 2009). Examination of statistical data further substantiates that "the number of PhDs produced in African countries shows that: the University of Ghana, in Legon, awarded 15 PhDs between 1998-2001 in all disciplines; Makerere University granted 43 PhDs between 1990-1998 in all the sciences; the University of Dar es Salaam issued 56 PhDs in all fields between 1990-1999; the University of Zimbabwe granted 32 PhDs in agriculture, arts and social sciences in 2001; UCT produced 382 PhDs between 1996-2000, and the University of Pretoria produced 1100 PhDs between 1991-2000" (Mutula, 2009, p.3).

Furthermore, the bottlenecks of the research productivity of scholars in African higher learning institutions often emerge from "the descriptive nature of research and the lack of empirical rigour (in part due to a lack of resources); paucity of cross-disciplinary research endeavours; limited collaborations between practitioners and academics; limited linkage between research and the national development agenda, decreasing state subsidies; shortage of research expertise and experienced supervisors; high subscription costs of scholarly journals; limited publishing infrastructure; lack of incentives for researchers; inadequate mentoring frameworks; and weak or non-existent partnerships" (Mutula, 2009:3). The scarcity of resources and multifaceted challenges of the African states have made most of the universities focus on addressing local challenges rather than engaging on basic research that makes them recognised in an international arena which by implication makes some of the research outputs not widely accepted by most of the international academic journals (Mutula, 2009). This phenomenon was aggravated by unsatisfactorily equipped library and laboratory facilities, limited access to up-to-date journals, poor ICT infrastructure and access to internet connectivity coupled with a poor dissemination mechanism.

2.4.14. Global competitiveness and internationalisation

Internationalisation of higher learning institutions in Africa is on the pressing agenda among governments, policymakers and higher education leaders in Africa (Uetela, 2017: vii). Globalisation and internationalisation pose both challenges and opportunities for African higher learning institutions. The quest for standardisation and harmonisation to the global standards may sometimes pose challenges in terms of meeting or addressing local challenges or problems which jeopardise the relevance of higher learning institutions in the community. The engagement of international academics and researchers and the adoption of English as the language of instruction are some of the mechanisms through which African higher education institutions are internationalising themselves. However, one of the challenges in this respect is to keep the striking balance between meeting international standards and at the same time keeping the larger societal needs back home at the same level. The lack of higher learning institutions to address such local challenges jeopardise the relevance of these higher learning institutions.

2.5. SUMMARY

This chapter reviewed the context of higher education using a funnel approach. It began with global trends facing higher education followed by contexts of higher education is the SSA in general and the two countries (Ethiopia and South Africa) under study in particular. It further examined the possible challenges and opportunities facing tertiary education in the SSA in broader terms and the two countries specifically. The next chapter reviews the antecedents to brain drain or intention to depart taking the different sectors in general and the higher learning institutions in particular into consideration.

CHAPTER THREE

THE CONCEPT OF BRAIN DRAIN

3.1. INTRODUCTION

This chapter presents a review of the existing literature that covers both theoretical and empirical evidences. The chapter covers areas such as the antecedents, causes, costs, and consequences of brain drain within the context of SSA. More specifically, the chapter accounts for the conceptualisation of brain drain, theoretical perspectives/debates on brain drain, major theories underpinning brain drain research, measuring brain drain, costs of brain drain, characteristics of brain drain, vulnerability to occurring of brain drain, theoretical foundations of antecedents of turnover intentions and hypothesis, causes of brain drain, impacts and consequences of brain drain, brain drain mitigation strategies in Africa, conceptual framework and finally a summary is provided.

3.2.CONCEPTUALISATIONS OF BRAIN DRAIN

The term brain drain has been conceptualised slightly differently by various authors with all definitions revolving around the movement of human capital from economically poor to economically more affluent countries. As stated in Gwaradzimba and Shumba (2010, p.210) by different authors, rain drain represents "the loss of highly skilled professionals, such as physicians, engineers, scientists, educators, university professors, and so one, from one country to another as they are strongly attracted to different living conditions, opportunities for professional advancement, the existence of an environment that is conducive to peace and security, and a host of other factors". According to this definition, it is possible to safely conclude that the underlying reason for the departure of human capital is essentially the development gap that exists between the economically more affluent and the relatively poor nations of the world (Gwaradzimba & Shumba, 2010). Some African scholars perceive the issue of brain drain as "the dilemma facing underdeveloped states in their interaction with the relatively advanced states" (Gwaradzimba & Shumba, 2010, p.211). The phenomenon allows the transfer of intellectuals from economically poor to more rich countries despite the fact that the cost of producing these intellectuals is borne by poorer countries and thus it seems that the poorer countries are subsiding the rich countries as they allow the destination countries "to reap the benefits in a way it helps them to expand their overall national wealth and strengthens its human resource base" (Gwaradzimba & Shumba, 2010, p.211). In other words, for Africans, "it is an index of its inability to compete with the north, and an important symbol of the gains which northern states make at their expense" (Gwaradzimba & Shumba, 2010, p.211).

Furthermore, the term brain drain seems to be used interchangeably with other phrases such as "human capital flight", "quality migration", "skilled international migration", "intellectual migration", "skilled

international labour circulation", "professional transient", "brain mobility", "migration of expertise", "reverse transfer of technology", and others terms such as "intellectual colonisation"; "intellectual desertification", and "brain haemorrhaging", essentially adopted by emerging from scholars from developing nations (Gwaradzimba & Shumba, 2010).

The term was redefined ethnocentrically and from a nationalistic perspective it refers to "a deliberate and systematic act by a country of superior power relations to consistently and persistently draw off, pump out, withdraw, remove, empty, or haemorrhage highly skilled persons from a poor-source country using direct or indirect means such as coercing, enticing or creating unfavourable socio-political and economic conditions which make staying at home unbearable, thereby forcing highly skilled professionals to leave their country" (Gwaradzimba & Shumba, 2010, p.212). Another ethnocentric and nationalistic definition of brain drain was given by Ansah (2002, p.21) stating that the global migration of skilled individuals is an uneven process and is characterised by the "exploitation" of developing countries by western countries through the poaching of their educated elite. The term was further defined as the "the emigration of highly skilled and educated professionals, usually from developing countries to developed countries, to take advantage of better social and economic opportunities"(Shumba & Mawere, 2012, p.108). Brain drain was also defined as "international transfer of human capital resources, and it applies mainly to the migration of highly educated individuals from developing to developed countries. In lay usage, the term is generally used in a narrower sense and relates more specifically to the migration of engineers, physicians, scientists, and other very high- skilled professionals with university training, often between developed countries" (Docquier, 2014, p.2).

The investigation of brain drain has been of continuing interest to organisations and researchers alike due to the high costs and damaging consequences associated with it (Harris, Kacmar, & Witt, 2005) and because it poses "a serious constraint on the development of poor countries" (Docquier, 2014, p.2). While some of the scholars have cautioned about the use of "Intent to…" variables in organisational research as a substitute for brain drain or employee turnover (Dalton, Johnson, & Daily, 1999), others have commented on the distinctness of the two constructs (Cohen, Blake, & Goodman, 2016) and several researchers have endorsed a strong link between turnover intentions and actual turnover (Premchandani, 2017; Radzi et al., 2009;Hellman, 1997). Also see the seminal works of Smart (1990 as cited in Tettey, 2006). It was against these empirical suggestions that the researcher decided to adopt the proxy measure 'turnover intention' to measure the phenomenon of brain drain for this particular study. The first reason for this is that results based on actual turnover research may not be proactive to address the factors contributing to the challenge. The second reason is the paucity/scarcity of and often inconsistent data on the actual turnover or brain drain in the context of African organisational settings. Lastly, employees with a high tendency to depart from their

organisations often have institutionally undesirable attitudes that contaminate other employees with whom they interact, all of which stands in the way of optimal work output (Griffeth, Hom, Gaertner, 2000). These reasons led the researcher to focus on 'intentions to turnover' instead of 'actual turnover'.

3.3.THEORETICAL PERSPECTIVES/DEBATES ON BRAIN DRAIN

There are three major perspectives in the analysis of brain drain, of which the first two are internationalist and nationalist perspectives (Ansah, 2002, p.21). The internationalist perspective takes a laissez-fair stance and suggests that the migration of highly qualified personnel results in the creation of a brain bank. On the contrary, the nationalist perspectives view migration as a deliberate exploitation of intellectual resources by rich western countries creating a neo-colonial cycle of dependency on former colonial masters and new world powers, resulting in an inevitable aggravation of underdevelopment in which highly skilled personnel leave the poorer countries where they are needed (Ansah, 2002, p.21). The third emerging perspective is that of globalisation which is oriented towards resolving the conundrum of the so-called drain and argues that all countries involved can potentially benefit from the mobility of labour. This perspective argues that the concept be changed to brain circulation instead of the drain. The key assumption in this perspective is that globalisation is a valuable tool that can be employed in circulating intellectual resources in the interests of all those involved in the network (Ansah, 2002, p.21). The solutions proposed for combating the challenges of brain drain depend on the perspectives adopted by the researchers and hence it is vital to examine the perspectives on brain drain.

3.3.1. Internationalist perspective of brain drain

Internationalist perspective of brain drain is also known as the world or cosmopolitan model. It follows the neoliberal rationalistic logic of human capital theory and argues that the migration decision is an interaction of the demand and supply side of the labour market due to remunerations. This model disregards the fact that there are some circumstances in which migrating professionals, especially in academia, are compelled to leave for many reasons, including a professional fight against excessively bureaucratic and political patronage systems of an administration or management (Ansah, 2002, p.22). In many developing nations, the university acts as a main think tank and platform for policy discourse and the source of ideas on diverse areas of life, and thus the flight of academics is detrimental to the institutions of higher education (Ansah, 2002, p.22).

The internationalist perspective rarely acknowledges the costs that migration of highly skilled professionals cause to the sending countries and they believe that the loss, if any, is short-term until such employees are trained and replaced by the new employees. It only acknowledges the loss of tax revenue to the government and shies away from recognising the problem that brain drain causes to the

sending countries (Ansah, 2002). This model was unable to address the grave problems that developing countries are facing as a result of the departure of highly skilled professionals (e.g. physicians and academics, etc.) which has serious negative consequences for the health delivery system and educational system of the home country (Ansah, 2002). The weakness of this theory to address the challenge has led to researchers and policymakers looking for an alternative approach or perspective for analysing the migration of highly skilled experts from one country to another.

3.3.2. Nationalist model of brain drain

The proponent of the nationalist model assumes that each nation must generate and use its own human capital (Ansah, 2002). This notion emerged from the belief that the departure of human capital is harmful to the emerging economies of the global south and that it disproportionately benefits recipient countries as it deters their ability to garner and safeguard economic and political sovereignty and well-being. The advocates of the nationalist perspectives criticised the selective immigration policies of the global north countries perpetuating the problem of shifting out the skilled labour from a source country, thus leaving it impoverished and burdened with unskilled labour. They further argued that the west has various strategies intentionally designed to drain human talent from emerging or developing countries through the introduction of structural adjustment programmes (SAPs), international scholarships and the selective immigration policies adopted by these countries (Gwaradzimba & Shumba, 2010).

SAPs are one of the bad experiences faced by African higher learning institutions which left a big scar in the higher education sector and the academic profession in particular. International bilateral organisations such as IMF and the World Bank defunded African higher learning institutions in the form of substantial cuts in aids to education which they imposed on African governments as part of their conditions for securing new loans or for debt payment rescheduling (Dembele, 2012; Gwaradzimba & Shumba, 2010). In addition to the global forces, these financial institutions have played a sigificant role in changing the higher education landscape for better or worse. For instance, the introduction of SAPs in most African states made academics find themselves among the least paid profession in the world which later accelerated the departure of highly qualified academics and professionals from the continent to the rest of the world where they can earn better and live a better life.

Another strategy that exacerbates the exodus of human capital is the provision of International scholarships by the western countries. The scheme is designed to attract the best and the brightest from Africa and other developing countries to the global north countries (Gwaradzimba & Shumba, 2010). Past experience has shown that many countries in the global north have designed various strategies to retain graduates from foreign countries as a means to overcome the local skill shortage faced by their

own countries. For instance, in 2004, Britain has adopted 'the Science and Engineering Graduates Scheme (SEGS)' which allowed non-Europeans who have graduated from a British institution in "physical science, engineering and mathematics" to take employment in the country for a year after qualifying. This attempt was made in response to the shortage of the "supply of science, technology engineering and mathematical skills" in the country (Gwaradzimba & Shumba, 2010). Although the original intention of the western governments and non-governmental organisations (NGOs) to offer scholarships was to equip the students with the necessary and relevant skills to help them contribute to the national development back home, the reality is that most of the students who attended their studies aboard stayed there and few of them went back to their country to offer the requisite service (Gwaradzimba & Shumba, 2010).

The skill-selective immigration policy of the western countries, including the USA, Canada, Britain etc., to attract highly skilled professionals, was meant to fill their skill gaps and to remain competitive in the global economy (Mackay, 2016; Gwaradzimba & Shumba, 2010). There are two primary reasons behind such a move: the quest by high-income countries to remain competitive in the knowledge-based economy and to overcome the effect of the aging population in their countries (Mackay, 2016). While Mackay (2016) favoured and legitimised the selective immigration policies on the ground that are quite different from other discriminatory variables such as race, ethnicity, religion, etc., early researchers such as Ansah (2002) and Gwaradzimba and Shumba (2010) objected and criticised such policies stating that they deplete the already scarce human capital and thus further deteriorate the service delivery system in the respective countries. The objection is with the presumption that producing highly skilled professionals is costly and it requires a substantial amount of investment from the public and hence should be discouraged. And, the author instead proposed the institutionalisation of restrictive labour and immigration policies ranging from preventing domestic jobs for natives to preventing the outflow of home-trained professional migrants (Ansah, 2002). Despite this, there are some scant form of empirical evidence that supports the net positive effect of the migration of the most academically talented individuals in smaller countries (Gibson & McKenzie, 2012; Gibson & Mckenzie, 2010).

Lastly, the nationalist perspective is myopic in that it shifts the responsibility of nurturing and retaining those highly qualified and competent professionals and academics from internal to external bodies such as immigrant-destination countries. However, the problem of African nations is the lack of ability to absorb those highly qualified professionals through some improvements. The obstacles in the career path and growth of these professionals include limited internal mobility within the labour structure, lack of adequate equipment, limited political freedom, and autonomy, as well as a lack of dynamic, functional professional associations (Ansah, 2002). The perspective divides the world system into two categories: developed/core countries versus developing/peripheral countries and largely sympathises

with the countries that are perceived to be the losers in the migration of labour. However, one has to clearly understand that the retention of the highly qualified professionals has to do partly with the way African nations manage their human capital. Nevertheless, this perspective is widely adopted by organisations such as IOM, NEPAD and several African states and they often mention the detrimental effects of brain drain, particularly in key sectors such as healthcare (Amponsah, 2012).

3.3.3. Globalisation model of brain drain

Globalisation model perspectives lean towards the international perspective but adopt a more proactive rather than laissez-faire stance. The proponents believe that 'brain circulation' occurs through globalisation without necessarily demanding the physical location of migrants back to their home countries (Ansah, 2002). The proponents of this model suggest that the world is intertwined and hence proposes that academic and cultural exchanges must be promoted to foster collaborations and exposure of otherwise spatially isolated highly qualified professionals. However, this stance was criticised by the proponents of the nationalist perspectives stating that it may provide an extra advantage for the economically advanced countries over the less advanced economies to attract the highly qualified professionals which further aggravate the drain (Ansah, 2002). The globalisation perspectives assert that the advent of technology and virtual communications connecting nations across the world helps the 'losing' countries to take advantage of the circulation of knowledge and skills back from the highly skilled professionals who have already left the country (Ansah, 2002). Furthermore, the globalisation perspective assumes that human capital is no longer bound to a particular space due to the interconnectedness of the world in an era of globalisation and knowledge workers (Kim, Bankart, & Isdell, 2011). The result of the research findings conducted in developed countries by the highly skilled professionals originally from the developing countries goes beyond the boundary of the place where the research was conducted but rather extends to the developing countries too (Kim et al., 2011). It is with this essential belief that the terms brain drain or brain gain are changing to brain circulation to indicate the beneficial effect of the mobility for both the sending and receiving countries. Despite this, it is essential to underline that the contribution of the human capital is significantly higher in the countries of residence than to the countries of origin (Kim et al., 2011).

As opposed to the international perspective that places the responsibility for the lack of the retention of highly skilled professionals in the hands of the sending countries and the nationalist perspective which puts the responsibility for the loss of human capital on the receiving countries, the globalisation perspective places the task of mobilising resources-at-large in the hands of all stakeholders: governments, international and national non-governmental organisations, for-profit-enterprises, communities, and individuals (Ansah, 2002). This model has limitations in that it only focuses on the current losses and proposes few measures to retain the departure of highly qualified professionals.

In essence, there is no single magic solution for the challenges of brain drain rather an integration of perspectives and the resulting solution is the strategies to be pursued to solve the problem. Strategies designed from a single perspective such as an approach pursued by South Africa and Ghana in order to retain the departure of medical doctors proved to be a failure as it backfired in the form of protest. In addition, strategies based on the globalisation model in order to bring back the diaspora working in foreign countries (e.g. Ethiopia from Canada and India from Silicon Valley, USA) through brain-networking were proved to be effective in some aspects but provided little direction for retaining the already existing talent in the home country (Ansah, 2002). Therefore, the interaction of the three models is something relevant and it strengthens the attempt of the developing countries to retain the highly qualified professionals.

3.4. MAJOR THEORIES UNDERPINNING BRAIN DRAIN RESEARCH

There are many theories of migration and other related theories explaining the departure of highly skilled professionals from their countries. Among the prominent theories widely adopted by many researchers in the field is the "push-pull theory of migration". Other theories include "The new economics of migration theory", "The Network Theory", "The World Systems Theory", "The Relative Deprivation Theory", and the "Human Capital Theory" (Porumbescu, 2015).

In the absence of a single theory that adequately explains the phenomenon, a multitude of theories were applied to explicate the factors behind the departure of highly skilled and educated professionals from their organisations. The next sub-sections briefly explain each of these theories and its relationship with the phenomenon under study.

3.4.1. Push-pull factor theory

The decision to migrate is the result of an interaction of several forces from both the sending and receiving countries (Tessema, 2010; Kline, 2003). These forces are classified into 'push' and 'pull' factors (Kline, 2003; Mejia, Pizurki, & Royston, 1979). Push factors are the series of reasons that attract the employees to a new workplace and are generally present in receiving or host countries. In this category, the search for better-paying positions, improved working conditions, higher standards of living, aspiration for career advancement and the professional development opportunities lacking in their home countries are some of the pull factors (Ghazali, Kusairee, Tan, Yasin, & Yasoa, 2015; Kline, 2003; Ronra & Chaisawat, n.d.)

In some instances, for example in the health sector, professionals depart to countries and areas where they think they may encounter lower risk to their personal safety (Kline, 2003). This phenomenon is evident in African countries where health professionals emigrate due to the high rate of HIV and infectious diseases demanding extensive treatment and care by the professionals (Kline, 2003). The

push factors represent conditions where employees become dissatisfied in their current job and aspire to seek alternative employment abroad (Ronra & Chaisawat, n.d.). These factors largely emanate from the sending or home countries (Kline, 2003). A range of factors can lead to the decision of the employee to voluntarily emigrate, including "insufficient career development avenues, tediousness, poor and ineffective supervisors, low level of employee participation and involvement and straightforwardly personality conflicts" (Ronra & Chaisawat, n.d.). According to this theory, wage disparities between the departure and host countries are the major drivers influencing the migration of skilled professionals (Abuosi & Abor, 2015). But, there are factors other than wage differentials that influence professionals to emigrate. Moreover, a study designed to examine the patterns of international doctorate choices to either stay or return back to home countries depends on the interaction of both the push and pull factors (Kim et al., 2011). The findings revealed that the reasons are never static and were changing depending on the immigration policy of the US, the economic and national development and policies of the host countries.

The push-pull theory is criticised on the premise that it ignores institutional factors, such as the legal or other constraints that play a crucial role in facilitating the migration process, apart from the push-pull factors (Osaretin & Eddy, 2012; Kline, 2003). For example, the absence of legal or other restraining forces that impede the free mobility of skilled workers influences the decision of a person to emigrate (Kline, 2003). Despite this, the theory is relevant in part addressing the major reasons driving the brain drain phenomenon. The theory is also relevant to explain the reasons why academics emigrate to other developed countries (Cloete, 2014; John & Birbirsa, 2014; Shumba & Mawere, 2012; Nabawanuka, 2011; Semela, 2011; Mihyo, 2007; Getahun, 2006; Nunn, 2005; Edokat, 2000).

3.4.2. The new economics of migration theory

The new economics of migration theory of migration analyses the migration phenomenon from the households' perspectives (Abuosi & Abor, 2015). Accordingly, it assumes that migration is not an individual decision but rather it is an interactive influence of groups such as family members and sometimes the community (Abuosi & Abor, 2015; Porumbescu, 2015). More importantly, the family plays a key part in persuading the member of the family to emigrate in order to overcome different types of risks that may be anticipated in the country of origin through remittances (Abuosi & Abor, 2015). In the developed countries, either government or insurance companies cover these, which the family members cannot afford to have in the developing countries. Migration is a means to overcome such risks (Porumbescu, 2015). In addition, efficient credit systems to acquire properties are seldom accessible in the developing countries and are very expensive (Porumbescu, 2015), which reinforces the decision to migrate. Therefore, in the absence of "efficient and accessible insurance and credit systems, the market failures are being perceived more intensely at an individual level, causing increased social pressure and favouring external migration" (Porumbescu, 2015, p.60). The New

Economics of Migration theory has been criticised for "being too narrow, excluding the role of other actors such as the state and employers in stimulating recruitment that fosters large-scale migration" (Abuosi & Abor, 2015, p.597).

3.4.3. The network theory

The network theory asserts that networking increases the likelihood of international migration. The social networks between the home and host countries mediate between individual actors at the local level and larger structural forces (Nyatoro, n.d.). This theory explains the existing migration phenomenon in the northern countries where the social networks mediate the development of individual migration into family migration. Both formal as well as informal relations are factors outside of the macroeconomic framework that influences migration decisions (Jauhar et al., 2015). Those non-economic factors include family members, friends, colleagues and professional contacts. This theory attests that migration does not occur in a vacuum; rather it is influenced by the larger group of people including families (Jauhar et al., 2015). Usually, the network gets larger and larger over time. Researchers have also documented that many migrants have ties with institutions such as academic institutions, Diaspora networks, government and non-governmental organisations, private employment agencies, corporations, religious organisations and so on (Poros, 2011). Emigrants mostly prefer places where they know other individuals or organisations to help them minimise the risk of displacement, ease their trip and allow them to easily adjust to the new environment (Poros, 2011). The work of this network is not limited to helping the emigrants find jobs; rather they go the extra mile to provide them with accommodation and assist them on how the newcomers should market themselves to get jobs (Poros, 2011). The network allows the emigrants to easily integrate at the host countries while at the same time keeping the connection with the home countries, which offers them the opportunity to have transnationalism (Poros, 2011). This theory is relevant to the study of the brain drain in the higher learning institutions in that the presence of the academics' networks affects the mobility of the academic staff in sub-Saharan Africa and beyond.

3.4.4. The world systems theory

The World Systems Migration Theory is another theoretical model that is employed to explain the brain drain resulting from migration of faculty and contends that migration is the childbirth or a natural outcome of the capitalist economic expansion through globalisation (Porumbescu, 2015; Nabawanuka, 2011;Nyatoro, n.d). According to this theory, the world is divided into "core, semi-periphery countries, and periphery countries" (Nabawanuka, 2011). While centre countries focus on advanced skills and have capital-intensive production, periphery countries focus on lower skills, have labour-intensive production and mining of raw materials, which persistently strengthens the supremacy of the core countries (Nabawanuka, 2011). This theory has the power to explain the relationship between two

countries that actually do not share a common boundary physically. It contends that capitalism is a historical social "system in which endless accumulation of capital has been the economic objective that has prevailed in fundamental economic activity" (Nabawanuka, 2011). On one hand, the theory also explains the reason why countries maintain the interdependence between the former colonisers and the colonised, in that the former are searching for cheap labour whereas the latter are looking for finished goods. On the other hand, there is a disparity in the level of advancement of education between the developed countries and developing countries, forcing former colonies to continue to depend on their former colonisers and the developed world for advanced education (Nabawanuka, 2011). During the process of acquiring advanced education, scholars (especially those in the scientific and technological areas) are lured by money and facilities that are only a dream in their home countries to stay and work in their host countries. The cumulative result of this is the brain drain (Nabawanuka, 2011).

3.4.5. Relative deprivation theory

The relative deprivation theory is a linchpin "theory of the New Economics of Migration" Theory which indicates that "the relative income position of a household or an individual is an important determinant of international migration" (Porumbescu, 2015, p.58). The tendency to emigrate may be higher in societies that experience high economic disparity (Porumbescu, 2015;Nabawanuka, 2011). People feel relatively deprived, and start aspiring to migrate as a means of improving their socio-economic status (Porumbescu, 2015). The salary scale of academics in African universities is generally lower compared to staff members working in universities in developed countries, which may be a reason why they tend to emigrate to other countries (Nabawanuka, 2011; Porumbescu, 2015). The glaring disparities or economic inequalities between academics and other professionals, in turn, motivate the deprived professional to emigrate (Nabawanuka, 2011).

3.4.6. Human capital theory

Human capital theory asserts "that the entity investing in human capital acquisition, whether an individual, a company, or a nation, believes the financial rewards to be reaped in the future will outweigh the costs incurred in the immediate-to intermediate term underlying the fact that the decision to invest in human capital is as such an economically rational choice made by the entities" (Kim et al., 2011; Psacharopoulos, 2006). In this context, the term human capital refers to the 'knowledge, skills, as well as the cultural and social' experience that collectively enhance an individual's efficiency, which in turn is beneficial to the individual as well as the society at large (Psacharopoulos, 2006).

Studies have indicated that there is a robust positive relationship between human capital and economic growth (Jauhar, Ghani, & Islam, 2016). The performance and overall competitiveness of an institution

(be it private or public, or service or manufacturing), among others, largely depends on its human capital (Hur, 2013). Human capital is advantageous for both the micro and macro level. The individual or micro benefits include monetary rewards such as improved salary or increased opportunities to get alternative means of generating income outside of the main area of employment emanating from the expert's status in wider community; and non-monetary benefits, for instance, enjoying elite status in the form of "pursuing professionally enriching and engaging career due to one's level of educational attainment" (Kim et al., 2011; Psacharopoulos, 2006). However, the social benefits of human capital refer to "the collective gains that can be attributed to the human capital acquisition on a macro level" (Kim et al., 2011; Psacharopoulos, 2006).

In specific terms, the proponents of the human capital theory assert that human capital determines the overall competitiveness of an institution and it is the outcome of a certain level of investment (Hur, 2013) by the nation states with the anticipation of future benefits from the investment. Thus, the loss of human capital can be equated with the loss of investment and hence it needs to be properly maintained and retained for the benefits of both the individual, institution and the respective countries through the design of appropriate human resource policies and strategies. In other words, at the macro level, the developed nations gain from the arrival of highly skilled professionals (carriers of human capital) from the developing world.

3.5. MEASURING OF BRAIN DRAIN

Brain drain data is scarcely available and largely inconsistent in the SSA countries (Walton-Roberts et al., 2017). Migration data is generally lacking in most of the countries of origin for devising policy mechanisms to curb the trend. In the absence of such comprehensive, reliable and consistent emigration data in the region, most of the past studies relied on an alternative approach to measure the magnitude of the problem. Each migration process involves two countries: country of origin (in which there is scarce data) and destination country. It is technically acceptable to make use of data collected in the destination countries as a substitute to understand the extent of emigration from source countries (Kaplan & Höppli, 2017). In fact, the immigration data are usually considered to be more dependable and precise than the emigration data of any given nation (Kaplan & Höppli, 2017; United Nations, 2010). In addition, this approach is helpful because the migrants regularly do not make it known when they leave the nation of their birthplace and this makes it virtually impossible for specialists to track the exact number of people who emigrate. Second, the emigrants are legally bounded to report in the destination country in one way or another which is not always common to do in the source countries. The third reason behind such intention is the fact that most of the migration reports generated by the source countries usually underestimate the extent of those who leave either because they do not have the means to record the information or the emigrants are reluctant to declare their departure. In this investigation, however, a proxy construct known as the 'propensity to leave' or 'intentions to leave the

job' was adopted by the researcher to measure brain drain phenomenon. In addition, secondary sources were consulted to understand the magnitude or extent of highly skilled migration from SSA to economically more affluent countries such as the OECD countries.

3.6. COSTS OF BRAIN DRAIN/TURNOVER

At the macro level, the cost of brain drain involves both investment costs in the form of education and training as well as and the lost return on investment as a result of the departing human capital (Kirigia, Gbary, Muthuri, Nyoni, & Seddoh, 2006). The direct costs are those that are spent on the professional for training and from primary school to the highest academic education level. However, the indirect costs are the opportunity costs of such investment and the expected return that the nations seek to gain from the professionals in the form of service delivery to the society at large.

Few studies have made an attempt to estimate the cost African countries are incurring because of the exodus of skilled professionals from Africa to other parts of the world, particularly to the OECD countries. For instance, Kenya spends the equivalent to US $ 65,997 and US$ 43,180 to train a single doctor and nurse respectively, leading to a loss of about US$ 517,931 and US$ 338,868 worth of return on investment for every physician and nurse who leaves the country (Kirigia et al., 2006).

A group of Canadian researchers conducted a study to determine the magnitude of the loss due to domestically educated physicians migrating from the nine SSA countries, namely Ethiopia, Kenya, Malawi, Nigeria, South Africa, Tanzania, Uganda, Zambia, and Zimbabwe to the four OECD countries such as Australia, Canada, the United Kingdom, and the United States. The researcher found that the estimated state subsidised cost of a physician's training (through primary, secondary, and medical school) ranged approximately from $21 000 (£13 000; €15 000) in Uganda to $58 700 in South Africa with the presumption that the departure occurred after completing their studies in their home countries (Mills et al., 2011). The findings further revealed that "the overall estimated loss of returns from investment for all doctors currently working in the destination countries was $2.17bn (95% confidence interval 2.13bn to 2.21bn), with costs for each country ranging from $2.16m (1.55m to 2.78m) for Malawi to $1.41bn (1.38bn to 1.44bn) for South Africa. The ratio of the estimated compounded lost investment over gross domestic product showed that Zimbabwe and South Africa had the largest losses. Whereas the benefit to destination countries of recruiting trained doctors was largest for the United Kingdom" (Mills et al., 2011, p.1).

Furthermore, the departure of human capital from the already 'scarce region' has hidden costs that jeopardise the development of the region (socially, economically, politically and technologically) by reducing the already depleted social services and slowing down institutional building in the home countries such as in Africa (Maharaj, 2010). Despite the existence of scarce and inconsistent data on

the topic, there is a growing concern over Africa's increasing exodus of skilled professionals vital for advancing the continent's development (Tebeje, 2005). A decade ago it was speculated that Africa will be "empty of the brain" if it consistently loses its scarce human resources to a relatively economically affluent western country (Tebeje, 2005). During the same period of time, the UN Economic Commission for Africa (ECA) estimated that about 127,000 highly skilled African experts departed from the continent between 1960 and 1989 (Tebeje, 2005). Moreover, it was estimated by the United Nations International Organisation for Migration (IOM) that Africa has kept on losing about 20,000 highly skilled professionals annually since 1990 (Tebeje, 2005). Moreover, the continent loses about US$4 billion a year for employment of approximately 50,000 expatriate professionals for technical assistance at different levels (Tebeje, 2005). Furthermore, the departure of human capital further negatively impacts the service delivery system across the region or continent, particularly the health and education sectors. For instance, the departure of health workers further deteriorates the already scarce stock of skilled health workers particularly among SSA countries that are already suffering from critical shortages (Dumont & Lafortune, 2016). It also widens the science and technological gap between the developed and developing countries negatively impacting the competitiveness of the sending countries (Docquier, 2014; Tebeje, 2005).

Furthermore, brain drain induces scarcity of human resources in key areas. For instance, when the departure of technocrats and healthcare professionals in disproportionately large numbers largely undermines a country's ability to adopt new technologies or deal with health crises (Docquier, 2014). For example, recent data reveals that there are fewer engineers in Africa per one million citizens compared to 168 in Brazil, 2457 in European Union, 4103 in the US and this has a serious implication on Africa's infrastructure development, a critical input for retaining highly qualified professionals (Kimani, 2016). Seminal works in the areas of the adverse effects of brain drain conclude that "brain drain entails significant losses for those left behind and increases global inequality" (Docquier, 2014, p.5). A theoretical case study in Ghana revealed that the departure of skilled professionals has a detrimental effect in that it is the most productive working years that are leaving which is apparently depriving the Ghanaian economy of their contributions and that the loss of talent has a ripple effect (Amponsah, 2012).

Docquier (2014, p.5) further underscored that "high-skilled emigrants do not pay taxes in their home country once they have left. As education is partly or totally subsidized by the government, emigrants leave before they can repay their debt to society. This fiscal cost may be reinforced by governments distorting the provision of public education away from general (portable) skills when graduates leave, with the country perhaps ending up educating too many lawyers and too few nurses, doctors, or engineers" (Docquier, 2014).

At the institutional level, depending on the type of brain drain (voluntary versus involuntary departure), the departure of employees has both costs and benefits to the organisations (Ndulu, 2014; Ghapanchi & Aurum, 2011). Some of the direct negative costs include costs of recruiting and training whereas some of the indirect costs include disruptions in organisational processes as a result of the departure of the employee (Ghapanchi & Aurum, 2011; Thatcher, Stepina, & Boyle, 2002). It was further elaborated that "the cost of hiring new employees, lower work quality by new employees and putting a company's reputation at stake are among the other negative consequences IT personnel leaving a workplace. Furthermore, turnover has the potential to lead organisations to lose individuals with relevant and valuable work experience, as well as their tacit knowledge about how internal systems operate" (Ghapanchi & Aurum, 2011, p.238).

From higher learning institutions' perspectives, the loss of human capital has serious repercussions for the delivery of quality of education, conducting cutting-edge and relevant research activities and enhancing the entrepreneurial capability of the higher learning institutions. Moreover, the departure of highly qualified academic staff can also seriously jeopardise the leadership capacity and overall human resources capacity of the institutions, affecting their overall performance or productivity and competitiveness both locally and globally. It is due to such implications that higher learning institutions should learn to devise mechanisms for retaining their top talents to ensure their sustainability in the industry. In this particular study, an attempt was made to evaluate the costs of the departure of academic staff from three universities in sub-Saharan Africa; namely Haramaya University and Addis Ababa University in Ethiopia and the University of KwaZulu-Natal in South Africa. In particular, the phenomena facilitates the transfer of human capital or resources from poor countries to rich countries (Ndulu, 2014). It has also a disrupting macro-level economic impact on both social and communicative structures (Robyn & Du Preez, 2013).

In essence, every departure of the elite from Africa further exacerbates and intensifies the problem, posing similar challenges from year to year. For instance, the departure of professionals further worsens the condition of least developed countries in such a way that when a health professional leaves a country, the doctor to patient ratio worsens; when every teacher or academic leaves the country, fewer children have access to educational resources; and finally when every engineer leaves the country, one less infrastructure project is completed (Amponsah, 2012). However, despite the severe impact of brain drain in the selected sectors such as healthcare and education, there is a very high number of scholars who still believe that brain drain has residual benefits. These are remittances, facilitating entrepreneurship, and human capital formation and technology transfer at home (Amponsah, 2012).

3.7. CHARACTERISTICS OF BRAIN DRAIN

According to Semela (2011), and as stated previously, there are two types of brain drain: external and internal. The external brain drain happens either through employees seeking employment in the foreign countries or through staff exchange and scholarships or further studies that may lead the recipient to remain in the host countries. However, the internal brain drain occurs when the employees leave the sector and join other sectors such as departing from the education sector or higher education and joining the industry within the country (primarily known as internal mobility).

3.7.1. External brain drain

External brain drain takes the form of cross-border mobility of human capital from economically poor and politically unstable to economically affluent and politically stable countries in search of better life for oneself and the family. The movement takes two major forms: Migration of highly skilled professionals, international scholarships, short-term training and staff exchanges. Thus, the migration of highly skilled professionals both within Africa and out of Africa can be classified as part of the external brain drain.

3.7.1.1. Intra-regional and international migration seeking employment opportunities

A main case of brain drain happens when people depart from their place of birth in search of better employment opportunities in economically developed countries. Though the phenomenon initially started with the departure of scientists from the UK to the US during the 1950s and 1960s (Jauhar et al., 2016; Gwaradzimba & Shumba, 2010), it was later expanded to include the emigration of highly skilled professionals from economically less developed countries, particularly such as Africa, to the economically well-developed countries in search of better life for oneself and the family. Such a phenomenon, however, depletes the already scarce human capital and skilled professionals from the regions such as the SSA, putting the continent in a dire condition in terms of service delivery, socio-economic, political, technological and entrepreneurial development and creating a scientific and technological gap between the developed and the less developed countries, including Africa.

From African perspectives, migration remains largely intra-regional (Gonzalez-Garcia, Hitaj, Mlachila, Viseth, & Yenice, 2016). For example, empirical data shows that in 2013, out of the 20 million SSA living abroad, about 13 million (65%) remained within SSA (Gonzalez-Garcia et al., 2016). The major receivers of immigration flows within SSA are Côte d'Ivoire, South Africa, and Nigeria due to their relatively larger and diversified economic conditions (Gonzalez-Garcia et al., 2016). Accordingly, Côte d'Ivoire, South Africa, and Nigeria were among the top three countries with the largest number of migrants from other African countries in 2013, respectively hosting about 2.3, 2, and 0.9 million people from other SSA countries (Gonzalez-Garcia et al., 2016). However, the

migrant-sending countries have either locational proximity, fewer economic opportunities in the home countries, and may be prone to political instability or naturally induced disasters (Gonzalez-Garcia et al., 2016). This intra-regional mobility or migration occurs in two ways, namely rural-urban migration and trans-boundary regional migration (Gonzalez-Garcia et al., 2016).

However, there has been a changing trend in the migration of Africans since the 1980s with a spatial diversification of emigration originating from Africa to the northern and southern regions of the globe (Flahaux & Haas, 2016). The migration of the working age population from Africa to the OECD countries increased sharply over the last 20 years, and has continued to do so, coupled with rapid population growth in the continent (IMF, 2016). In 2013, the migrants from the SSA represented one-third of the total stock of migrants in the OECD countries (IMF, 2016). Further evidence attests that migration of people from the SSA to other parts of the world has increased from less than one million in 1990 to six million in 2013 whereas migrants within the continent have increased from four million to 12 million during the same period (Gonzalez-Garcia et al., 2016).

An empirical study was conducted based on a sample of 117 countries of which 43 were from sub-Saharan Africa with respect to the determinant of migration of human capital from developing countries to OECD countries over the years from 1997 to 2013. The results revealed: the income differential/gap was a significant pull factor, population growth in origin countries a push factor, existence or absence of prior networks abroad, the distance between the host and sending countries, health provision and facilities in the source countries as well as destination countries, and at the main destination having a common language without reference to those historical colonial relationships (Gonzalez-Garcia et al., 2016).

With respect to skilled professionals including health workers, engineers, technology experts, researchers, and academics, secondary data sources such as the OECD and the United Nations' Department of Economic and Social Affairs (UNDESA) in 2013 estimated that one out of nine individuals born in Africa with a university degree or post-secondary education migrated to economically advanced countries outside of the African region (Soergel, 2016). There is increasing evidence that the mobility of highly skilled professionals typically follows the flow of the larger migration in the region. For instance, empirical evidence from 31 countries in SSA showed that two-thirds of the physicians working in the US and the UK were from Africa (Okeke, 2013). When compared across the countries, the large stock of migrant physicians in the two countries (US & UK) between 1975 and 2004 were from South Africa (18,292) followed by Nigeria (7042), Ghana (1480), Kenya (690), Ethiopia (646), Zimbabwe (600), Uganda (385) and Zambia (321) (Okeke, 2013). The extent of mobility of highly skilled professionals from the SSA has persistently and significantly increased over the years compared to the rest of African regions such as North Africa, the Middle East, and the South-East Asia (Kigotho, 2013). This implies that Africa is losing competent and qualified

human resources that are vital for the socioeconomic, political, technological and scientific progress of the continent (Moullan, 2014; Osaretin & Eddy, 2012). Therefore, despite the existence of diversified economies in the SSA region, there is a general consensus that SSA populations are losing future generations of workers that could possibly serve as healthcare professionals, engineers, academics and experienced employees domestically (Soergel, 2016). Several reasons can be cited for the departure of African scholars to other western countries. These factors are, but not only limited to circumstances in the home countries such as resource embezzlement, political conflict and turmoil which have made other pastures appear much greener (Jonathan Crush, Campbell, Green, Nangulah, & Simelane, 2005). Further empirical data shows that Ghana lost nearly 25% of their healthcare workers trained between 1995 and 2002 (Amponsah, 2012). At the beginning of the 21st century, Teferra (2005) anticipated that developing countries, including Africa, will continue to experience an increasing outflow of talent and skills until such time that the socioeconomic and socio-political environment of these regions improves significantly.

3.7.1.2. Short-term training, staff exchange, and scholarships

Brain drain also occurs when students who went for abroad for training decide to remain in the host countries after completing their studies (Baruch et al., 2007). A longitudinal study taking three cohorts of doctoral graduates from the US between the 1980s and 2000s revealed that the rate of stay has dramatically increased over time. For instance, during the 1980s almost 49.5% of the international students' doctoral graduates stayed while the other close to half of them returned to their home countries. However, the data after 20 years (during the 2000s) revealed that only one-third (33.9%) of the international doctoral graduates returned to their countries whereas two-thirds (66.1%) of the graduates decided to remain in the US (Kim et al., 2011). Empirical studies have shown that an interaction of both push and pull factors predicts the intention of the international doctoral graduate's decision to either stay or return (Kim et al., 2011). The push factors are the socio-economic and political circumstances of the home countries that force them to leave the countries whereas the pull factors are those that influence the graduates to remain in the host countries or countries of training such as the immigration policy of the host country. Moreover, the study further indicated that the decision to stay or return varies over time depending on but not limited to the personal characteristics (e.g. gender), macro context of the countries of origin of the students, and the fields of specialisations e.g. graduates of the disciplines of Science, Technology, Engineering and Mathematics (STEM) are the most vulnerable to stay compared to graduates of other fields of studies (Kim et al., 2011).

A close examination of the motives behind international students' inclination to stay instead of returning to home countries revealed that the reasons varied from country to country. For instance, Turkish students who attended their studies in North America cited that political and economic conditions in the home country, the lack of proper national research or integrated educational

development strategy were the main factors for the decision to remain in the US upon completion of their studies (Güngör & Tansel, 2008). However, when viewed across the fields of specialisations, the study revealed that doctoral graduates of Agriculture/Health, Biology, and Education; Agriculture/Health, Biology, and Engineering; and Agriculture/Health, Education, and Social sciences were the top three returnees in the 1980s, 1990s and 2000s respectively (Kim et al., 2011). The author further indicated that the reduction in the rate of return of the biology graduates during the 2000s has to do with the changing public policy and that funding places superior importance on biology/life sciences (Kim et al., 2011). From this, it is possible to conclude that the graduates' inclination to either stay or return is also influenced by the overall macro-level context of the country in which they have attended their studies. Furthermore, another study based on 949 management students' inclination to stay in the US and the United Kingdom revealed that students' perceptions of ethnic differences and labour markets, their adjustment process to the host country, and their family ties in host and home countries were the major factors influencing their decisions (Baruch et al., 2007).

Further evidence has shown that the decision to remain in the host countries after completion of their studies is the outcome of the interaction of multifaceted factors (Teferra, 1997). For instance, evidence shows that a significant proportion (35%) of experts from Africa went overseas for further studies between 1982 and 1997. The majority of them originated from Egypt, South Africa, Nigeria, Kenya, Ghana and Ethiopia (Shinn, 2002).

To encapsulate, there is a trend indicating a greater numbers of students travelling to study abroad in the coming years which is indicative of the trend that the mobility of talented students will be prevalent in the immediate and distant future, mainly due to slow expansion of higher education in parallel with the booming population in the continent (Woldegiorgis & Doevenspeck, 2015). Knowing the vital role that knowledge workers play in the economic advancement of the host nations, developed countries tend to attract "the best and the brightest" (Kapur & McHale, 2005) through their immigration policies despite the fact that the effectiveness thereof varies from country to country (Czaika & Parsons, 2015). An example of the 'slightest action' that they take in terms of their migration policy rewards them with a large pool of top talented human resources which may ensure the sustainability of their global competitiveness. There is also a deliberate attempt by developed nations to attract top talented students to enroll in postgraduate programmes through their selective immigration policy initiatives (van der Wende, 2015). For instance, the decline in educational standards in Nigerian Universities led to the departure of Nigerian academics and students (Osaretin & Eddy, 2012). Nowadays, it is common knowledge that countries, particularly those economically affluent such as Australia, Canada, USA, and UK ,are engaged in the global competition for talent through their both implicit and explicit policies for attracting international students (Sá & Sabzalieva, 2018). This action may further intensify the brain drain situation in less developed countries concomitant with the local push factors such as

political instability and the lack of sufficient health and educational infrastructure and the global pull factors under the umbrella of "great brain race" (Sá & Sabzalieva, 2018).

3.7.2. Internal brain drain

Another major characteristic of brain drain is the mobility of employees within sectors usually referred to as the circulation of human capital within the country (Semela, 2011). For instance in the health sector, the mobility of healthcare professionals within the country is characterised by the flows from the primary healthcare level to hospitals or from rural to urban areas (Wibulpolprasert & Pachanee, 2016; Labonté et al., 2015;), from scientific and research positions to administrative posts, and from the government to the private service providers (Kober & Van Damme, 2006; Marchal & Kegels, 2003). In the education sector, however, it involves the movement of academics from universities to the private sector or NGOs (Semela, 2011; Teferra, 2000).

A study conducted in Thailand revealed that there is a high mobility of physicians and nurses from the public to private hospitals due to the increasing demand for healthcare services resulting from the arrival of an enormous number of patients from the rest of the world (Wibulpolprasert & Pachanee, 2016). The phenomenon of internal brain drain of health professionals, from rural public health providers to urban private health providers, due to 'medical tourism' accompanied by a large number of patients from across the globe has intensified the long-term problem of unequal distribution of healthcare professionals (Wibulpolprasert & Pachanee, 2016). In 2004/5, for instance, more than 350 highly qualified doctors left the public hospitals, mainly from the medical teaching hospitals, to join private healthcare institutions (Wibulpolprasert & Pachanee, 2016) which is presumably a common trend across the rest of developing countries, including Africa.

Empirical evidence shows that the rural-urban mobility of highly trained professionals such as university staff and healthcare professionals in the sub-Saharan Africa countries follows a similar pattern to that of the developing countries. This phenomenon is also true for economically viable countries in the SSA including South Africa. What makes the matter worse is that SSA has carried 25% of the global disease burden, but only has less than 3% of the minimum threshold of 23 healthcare workers per 10000 population set by the World Health Organisation (WHO) (Kasper & Bajunirwe, 2012), which is an indication of poor performance in terms of producing and retaining highly qualified health professionals in the region. Similarly, a study by Okeke (2013) further witnessed that only five out of 31 SSA countries meet the minimum threshold of the stock of health professionals per 1000 population, signifying the severity of the problem.

One of the reasons for such a chronic shortage of health workers such as physicians and nurses can be partly explained by the mobility of the healthcare workers from the public to private settings. A recent

study in South Africa expressed its concern regarding the issue of international mobility of health workers from public to private as follows "Internal South African health workers remained a concern claiming that the private health care providers are said to 'poaching' physicians from the rural public health facilities which in turn is 'poaching' nurses from the private sector"(Labonté et al., 2015, p.9). Health workers also consider moving to cities as a first step to migrating overseas even where an imbalance exists in the rural and urban areas (Lofters, 2012).

At the beginning of the 21st century, it was pinpointed that the mobility of skilled professionals from rural to urban areas within the same country and from economically less-developed to economically advanced countries was a long-standing phenomenon with an extreme proportion particularly in Africa (Marchal & Kegels, 2003). By underscoring the detrimental effect of the departure of healthcare professionals and its implications on the disease control initiatives in the rural part of Africa where the healthcare facilities are largely limited, if not non-existent, the study indicated that poor professional satisfaction and the deteriorating social valuation of the professions are important factors contributing to the decreasing attraction of the health professions. And that this has acted as both push and pull factors from the perspective of sending and receiving countries respectively (Marchal & Kegels, 2003).

In line with this notion, a cross-sectional survey study aimed at examining the extent of the influence of salaries on the health workers' decision to migrate. The study was based on a sample of 694 healthcare workers in KwaZulu-Natal province, of which 430,133 and 131 were from the public, NGO and private sectors respectively. The results revealed that the health professionals' decision to move to urban areas was largely determined by factors such as age, levels of stress experienced and the extent to which they were satisfied at their current place of work (George, Atujuna, & Gow, 2013). The study suggested that the South African Department of Health needs to improve the working environments for the health workers to remain within the public health sector and thus refrain from joining the private facilities as this jeopardises the livelihood of the rural residents (George et al., 2013). Furthermore, a study conducted a decade ago in the context of the Swaziland public healthcare system pinpointed HIV/AIDS as the major factors depleting the health workforce (Kober & Van Damme, 2006). In the same line of argument, another study identified the migration of healthcare professionals as a key challenge facing the healthcare delivery system in the region (Kasper & Bajunirwe, 2012). Another study revealed that although external or international brain drain contributes to the shortage of health workers in Rwanda, the role of internal brain drain (mobility of health workers to NGOs) cannot be undermined (Rubagumya, Hrdy, Uwase, & Kamanzi, 2016).

Sector-wise, internal brain drain is also rampant in higher learning institutions in the SSA with its peculiar characteristics. Evidence indicated that there is a movement of highly skilled academics from universities to either the private sector or NGOs in the various countries (Ng'ethe, Iravo, & Namusonge, 2012; Semela, 2011; Teferra, 2000). Another study considering the context of selected

public higher learning institutions indicated that the internal mobility of human capital is evident in the sub-sector. The researchers identified five major push factors for the vulnerability of academic staff members to internal mobility, including poor pay and salary scale, unfavourable working environments, dissatisfaction with the institutions' management, limited opportunities for professional development and career advancement, and the lack of sufficient research funds (Semela, 2011).

In short, there are two major patterns of brain drain in Africa. However, in this particular study, the researcher was not interested in differentiating between the internal and external brain drain; instead the focus was on the propensity of academic staff members to depart from their respective institutions as a predictor of actual departure.

3.8. VULNERABILITY TO OCCURRING OF BRAIN DRAIN

Broadly speaking, African countries are more vulnerable to brain drain than developed or OECD countries. Due to the socio-economic, political and technological context of the continent, an exorbitant number of highly skilled professionals and young vibrant Africans are leaving the continent, putting it in a dire condition. Thus, those economically poor and politically unstable countries are more vulnerable to brain drain than developed countries. Moreover, a certain segment of the professionals such as academics, health workers, teachers and people with the discipline of the STEM are more vulnerable to brain drain than others. Although many of the countries across the world are prone to such a phenomenon, developing countries are more prone or susceptible to brain drain. However, at an institutional level, various sectors are vulnerable to the mobility of highly skilled professionals. Among others, the education sector and the health sectors are the most vulnerable to the departure of trained healthcare professionals. Higher education institutions are also vulnerable to both within and out of the country mobility as its survival depends on its people (Semela, 2011). With the continuing decline in government funding of higher education due to competing priorities in the society and the alarming increase in number of students coupled with the ever deteriorating living conditions, declining academic freedom, deteriorating infrastructure and declining intellectual engagement in the sub-sector, the higher education sector remain one of the less preferred destinations for the best and brightest minds.

In the case of health professionals, a cross-sectional survey study aimed at examining the emigration intentions of 651 final year trainee health professions in six Southern African countries revealed that healthcare professionals tend to leave more readily than others trained to work in other sectors (Johnathan Crush & Pendleton, 2012). When the students were asked to rate the most likely destinations within the Southern African regions, the destinations were not rated by the students and they indicated they would prefer to rate overseas countries (Johnathan Crush & Pendleton, 2012). However, another study indicated that the prevalence of the departure of health professionals from

South Africa to the rest of the world has gradually decreased though it was difficult to present the figures to visualise the trend due to the lack of systematic and well-organised data over the years (Labonté et al., 2015).

In the same line of argument, a cross-sectional study conducted among 600 medical students at Addis Ababa University in June 2009 revealed that more than 50% of the respondents aspired to depart from their countries for the economically more affluent countries such as the USA and Europe after their graduation (Deressa & Azazh, 2012). The findings revealed that the senior students were more inclined to emigrate (63% of the year IV and 71% for internship) compared to lower batches (45% for Year I to 54% for Year III students) (Deressa & Azazh, 2012). Lastly, males were found to be more likely to emigrate than females (Deressa & Azazh, 2012).

3.9. THEORETICAL FOUNDATIONS OF ANTECEDENTS OF TURNOVER INTENTIONS AND HYPOTHESES

Past studies have shown that there are a number of antecedents to brain drain or propensity to leave including demographic factors and organisational factors such as quality of work life (QWL), organisational justice (OJ), job satisfaction (JS), leader-subordinate relationship (LMX), rewards and benefits (R&B) and organisational citizenship behaviour (OCB). Review of past studies shows that there are a number of antecedents of turnover intentions including job stress and organisational justice to job satisfaction and quality of work life (Kaur, Mohindru, & Pankaj, 2013). For the purpose of this analysis, the antecedents of turnover intentions or propensity to depart are classified into two broad categories: demographic/personal factors and organisational or work-related factors. The following sub-sections examine the relationship between selected demographic factors and organisational or work-related factors on turnover intentions.

3.9.1. Demographic factors and employee propensity to leave

Many studies have been conducted to examine the relationship between socio-demographic factors and turnover intentions from the institutions in different settings (Akova et al., 2015; Chowdhury, 2015; Emiroğlu, Akova, & Tanrıverdi, 2015;Agyeman & Ponniah, 2014; Hundera, 2014; Lee et al., 2013; Sun et al., 2013; Almalki et al., 2012; Samad, 2006; Hatton & Williamson, 2003), while other researchers have argued that no significant relationship exists between these variables and intentions to depart from the organisation (Almalki et al., 2012). This study examined the extent to which these variables predict turnover intentions in the context of higher learning institutions operating in two African countries – South Africa, which is relatively viable economically and environmentally conducive and Ethiopia, relatively weak economically with poor working conditions.

Studies have shown that employees' turnover intentions differ based on gender (Momani, 2017; Emiroğlu et al., 2015; Hundera, 2014; Karatepe, Uludag, Menevis, Hadzimehmedagic, & Baddar, 2006; Carbery, Garavan, O'Brien, & McDonnell, 2003; Cotton & Tuttle, 1986). The studies indicated that males have a lower tendency to leave than females (Emiroğlu et al., 2015), although the data obtained from China failed to support this (Wang, 2017). A study taking science, STEM disciplines into account have shown that women's tendency to leave compared to males was associated with the lack of satisfaction with research facilities, career advancement prospects and ideas absent of academic freedom (Xu, 2008).

There is a vast amount of evidence indicating that marital status is a significant predictor of employees' intention to depart from an institution (Wang, 2017; Emiroğlu et al., 2015; Cho & Lewis, 2012; Carbery et al., 2003; Cotton & Tuttle, 1986). It has been argued that single or unmarried individuals have higher tendency to depart than married individuals. A reason for this is that married people often have other family responsibilities making a job change much more disruptive (Cho & Lewis, 2012). A few studies have shown the significant effect of educational level on employees' intentions to depart from their organisation, taking the circumstances of the hospitality business in Asia into account (Karatepe et al., 2006).

The relationship between age and turnover intentions has been examined by various researchers (Emiroğlu et al., 2015;Al-Hussami, Darawad, Saleh & Hayajneh, 2014; Karatepe et al., 2006; Lambert, Hogan & Barton, 2001;Cotton & Tuttle, 1986). The literature on whether age has any effect on an employee's intention to depart from their place of employment has been inconsistent with certain studies showing that young employees are more inclined to depart than older people (Emiroğlu et al., 2015; Karatepe et al., 2006; Lambert et al., 2001; Cotton & Tuttle, 1986), and others arguing that there is no significant correlation between age and employees' turnover intentions (Al-Hussami et al., 2014). However, those who argued that significant differences exists between age of the employee and their tendency to depart attributed it to various reasons. For instance, Cotton and Tuttle (1986) indicated that older people have a lower tendency to withdraw from their employment for two major reasons. One is familiarity with the job and their work environment when they get older and the other reason is that adult individuals usually have lower aspirations than younger individuals (Wang, 2017, p.22). Others have attributed the tendency to intergenerational differences (between baby boomers, generation X, and generation Y) (Wang, 2017; Latkovikj, Popovska & Popovski, 2016). Studies on the hospitality business have shown that previous generations (baby boomers and generation X) differ considerably from generation Y when examined from the perspectives of job-related values, characteristics, and attitudes (Solnet & Hood, 2008). In terms of career aspirations, generation Y employees are apparently self-centered and demanding (Maxwell, Ogden, & Broadbridge, 2010), and have a relatively lower dedication to their work and higher tendency to depart than generation X

employees in an organisation. The weak psychological conviction with the organisation could be the reason for the generation Y employees' high tendency to depart and their lower levels of organisational allegiance and dedication (Blomme, van Rheede, & Tromp, 2010). Studies have found that some Y generation employees have a higher anticipation of pay raises, career advancement and adaptability compared to adult generations and, hence, they decide to depart from their current job whenever they think that a change is more beneficial to them (Wang, 2017; Blomme et al., 2010; Gursoy, Maier, & Chi, 2008). This study, therefore, assessed the extent to which propensity of academic staff to depart differs with age across the three universities in the sub-Saharan African context.

Several studies have also pronounced that tenure, among other demographic factors, yielded significant associations with turnover intentions (Momani, 2017). Studies further propounded that experienced employees generally have a lower tendency to leave than the less-experienced ones (Uludağ, Khan, & Güden, 2011; Nadiri & Tanova, 2010; Karatepe et al., 2006). This happens because less experienced employees tend to depart from their job because they are being paid lower salaries, have invested less in their pension funds and are highly likely to make a change in favour of a better paying position (Cho & Lewis, 2012). New employees are also less likely to be married or have children, making geographic moves less disruptive (Cho & Lewis, 2012) .

Past studies have shown that turnover intentions differ based on educational levels (Emiroğlu et al., 2015). They have concluded that employees with lower educational status have a lower tendency to depart compared with those that with a higher educational status (Emiroğlu et al., 2015; Karatepe et al., 2006; Carbery et al., 2003). Earlier studies supported the notion that people with higher levels of education have higher expectations in terms of "financial rights, benefits and audit" (Chen, Wang, & Cheng, 2010), "towards their current employers, which means that the fulfilment of their needs is much more difficult" (Iqbal, 2010), compared to those with lower educational status (Emiroğlu et al., 2015). Another researcher supported the idea that people with better training and education tend to opt for more work opportunities and have a broader understanding than uneducated people (Lambert, 2006).

Previous studies have suggested that turnover or turnover intentions in African universities vary depending on the field of expertise/discipline (Mitiku, 2010; Tettey, 2006). A study conducted in five African universities had the objective of designing retention strategies focused on disciplines such as health sciences, engineering, business, economics and computer/information science with the presumption that these are areas most susceptible to brain drain (Tettey, 2006). Empirical evidence based on four years of turnover data, (from 2005 to 2008), revealed that of the 226 academic staff members who left Addis Ababa University during this period, the faculty of education and social science constituted the highest percentage (27%) followed by the medical faculty (19%), technology (18.6%), science (16.4%), college of business and economics (14.16%), law 3.1%), veterinary medicine and music school, both accounting for 0.9% (Mitiku, 2010). This shows that the magnitude

of turnover varies from one discipline to the next. In this particular study, the researchers tested if areas of specialisation significantly differ in predicting turnover intentions across the three universities.

With respect to academic rank, the data obtained from Addis Ababa University have shown that the majority of the staff members who left the higher education sector are lecturers (Mitiku, 2010). In this respect, there is a paucity of empirical evidence regarding the turnover intentions of academic staff vis-à-vis their academic rank. This study examined the notion that turnover intentions differ according to academic rank across the three universities.

Findings regarding the association between remuneration and tendency to depart are inconsistent within different settings. Emiroğlu et al. (2015) argued that turnover intentions differ based on income groups, but Al-Hussami et al. (2014) claimed that remuneration is not a significant predictor of turnover intentions. Some of the studies regarding the association between remuneration and turnover intentions were conducted in the context of the health sector focusing on nurses working in Asian countries. This study is unique in that it relies on data obtained from African universities operating in relatively different contexts using a comparative approach.

Moreover, some of the studies have been undertaken to assess the influence of demographic factors on the propensity of academic staff to depart from their employment in the sub-Saharan African context in broader terms and the higher education sector in particular. The key purpose of this research was to examine the influence of demographic factors such as age, educational level, marital status, tenure, areas/fields of specialisation, gender and other related factors on employees' turnover intentions at three universities. The following hypotheses were formulated for testing based on the existing literature.

3.9.2. **Organisational factors and employee propensity to leave**

This part of the research examined the collective influence of (1) the quality of work life (QWL), (2) organisational justice (OJ), (3) job satisfaction (JS), (4) supervisor-subordinate relationship (LMX), (5) rewards and benefits (R&B), and organisational citizenship behaviour (OCB) on employee turnover intentions.

3.9.2.1.Quality of work life (QWL) and turnover intentions

The current state of development of the concept of QWL has evolved through a number of historical moments and interventions such as "unionisation change in the 1930s and 1940s, legislation enacted in early 20th century that protected workers from incidents and eliminated job conditions were initial stages" (Phan & Vo, 2016; Walton, 1973) especially in the USA. Despite its existence during the 1960s, the term QWL was first introduced in 1972 by Hian and Einstein during the international labour

relations conference held in Rome (Phan & Vo, 2016). The term originally referred to the need satisfaction obtained from an interaction of employees' basic needs such as survival and self-actualisation needs and other related resources of an organisation for meeting them (Phan & Vo, 2016). However, it gradually evolved to include an employees thoughtful reaction to, and happiness with their job and total job setting (Taher, 2013). Later the term was expanded to embrace issues such as "working condition, job security, workplace and economic gains, positive relationship between morale and productivity, equal employment opportunity, human needs and expectations, and the relationship between motivation and leadership" (Phan & Vo, 2016; Subrahmanyam et al., 2013).

Despite the absence of a formal and universally accepted description of QWL, scholars in general agree that it deals with the welfare of employees as opposed to job satisfaction, one of many outcomes of QWL (Sirgy, Efraty, Siegel, & Lee, 2001). More specifically, QWL covers other aspects of life such as family, leisure, social, financial life, and so on. The construct covers overall well-being, work life balance, working conditions, anxiety at work, job-career satisfaction, and control at work (Iyabode & Olayinka, 2016; Van Laar, Edwards, & Easton, 2007). Furthermore, the term QWL denotes an "employee's satisfaction with working life; it is a subjective phenomenon that is influenced by personal feelings and perceptions"(Lee et al., 2013).

Some researchers argue that enhancing an employees' QWL has the power to improve the worker's self-actualisation in addition to improving the organisation's productivity (Lee et al., 2013). QWL plays a significant role in the attraction and retention of the workforce in an institution (Noor & Abdullah, 2012) through the creation favourable working conditions for employees to remain and commit themselves to the effective performance in the system (Phan & Vo, 2016). Such an environment further fascinates the employees and keeps the talented brains in whole fields (Phan & Vo, 2016). In essence, the notion of QWL holds that individuals are the most vital resources in any organisations in that they are capable of making critically important decisions on behalf of their organisations.

Empirical findings revealed that there is a relationship (both positive and negative) between QWL and employee turnover intentions (Nor, Noor, Ahmad, Khalid, & Ibrahim, 2017; Nayak, 2016; Lee, Dai, & Mccreary, 2015; Surienty, Ramayah, Lo, & Tarmizi, 2014; Lee et al., 2013; Mosadeghrad, 2013;Almalki et al., 2012). For instance, a cross-sectional study that examined the correlation between QWL and employees' tendency to depart among a total sample of 508 primary healthcare centre (PHC) nurses in Saudi Arabia revealed that 40% of the workers stated that they tend to depart from the centre as they were dissatisfied with their QWL (Almalki et al., 2012). The study further showed that turnover intentions were significantly related to QWL and thus QWL explains 26% of the variance in turnover intention, $p < 0.001$, with $R^2 = .263$ (Almalki et al., 2012). Moreover, a study designed to partly test the theoretical model on the effect of QWL and employees' tendency to leave the organisation among

a sample of 608 hospital employees found that QWL is inversely related to turnover intentions (Mosadeghrad, 2013). The findings further concluded that managers can improve workers' QWL by taking appropriate actions to reduce employees' tendency to depart from the organisation.

Another study designed to examine the influence of QWL on the psychological well-being of a sample of 144 employees of various organisations in India proved the existence of a significant relationship between the two constructs (Rathi, 2010) which in turn significantly influences turnover intentions (Chang, Chiu, & Liu, 2017; Amin & Akbar, 2013).

A descriptive cross-sectional survey study with the goal of examining the predictive power of QWL of hospital nurses on their propensity to depart from their units, organisations and the profession revealed that different patterns of QWL dimensions are predictive of their tendency to depart from departments, organisations, and the profession (Lee et al., 2015). The study further found that the QWL dimensions such as "work arrangement and workload, nursing staffing and patient care, and work home life balance" significantly predicted turnover intentions. However, the teamwork and communication dimension of the construct only predicted the tendency to depart from the unit, but not from their organisations and profession (Lee et al., 2015).

Thus, it is hypothesised that:

H_1: There is a significant negative relationship between academic staff's perception of quality of work life (QWL) and propensity to leave their institutions.

3.9.2.2.Organisational justice (OJ) and turnover intentions

This sub-section examines the influence of OJ on turnover intentions based on the review of the literature. Organisational justice has a far-reaching effect in shaping the behaviours and attitudes of employees in the workplace. In as much as the perception of fairness in the workplace among employees contributes to the competitiveness and excellence in organisational performance, the perception of unfairness has damaging and adverse effects on organisational performance and employee behaviours in the workplace (Gurbuz & Mert, 2009; Suifan, Diab, & Abdallah, n.d.).

The term organisational justice refers to the extent of fairness in the organisational settings ranging from the way decisions are made to the way jobs are allocated to individuals, the way performance is conducted and the associated benefits allocated, the way resources are allocated in an organisation and finally the manner of human resources management practices. Generally speaking, there are three types of organisational justice: "Distributive, Procedural and Interactional Justice"(Lee, Kim, & Kim, 2016). Distributive justice refers to "the member's perception of fairness related to allocation of products such as wages paid through a decision conferring procedure, promotions, and recognition with the

organisation" (p.2). Procedural justice refers to "the perception of fairness in the process through which members are compensated for their investment by way of wages, promotions, and evaluations" (p.2). Lastly, interactional justice is "concerned with the quality of interaction that members receive while engaged in a decision conferring procedure" (p.2).

Past studies have shown that employees' perception of fairness in an organisation (e.g. organisational justice) may likely influence the employees to either stay or leave (Khan, 2016; Lee et al., 2016; Sokhanvar, Hasanpoor, Hajihashemi, & Kakemam, 2016; Irum, Javed, Hashim, Rehman, & Jamil, 2015; Gim & Desa, 2014; Karatepe & Shahriari, 2014; Rai, 2013; Muzumdar, 2012; Nadiri & Tanova, 2010; Radzi et al., 2009; Parker & Kohlmeyer, 2005; Hendrix, Robbins, Miller, & Summers, 1998). These studies on one way or another attested that the perception of employees towards fairness practices in an organisational setting determines their decision to either remain or depart from the organisation. Furthermore, a series of empirical evidence encompassing different regions and sectors further attests that organisational justice negatively influences employee turnover behaviour (Chin, Guo, Hsieh, Wang, & Shiao, 2017; Imran & Allil, 2016; Bakri & Ali, 2015; Irum et al., 2015; George, 2014; Muzumdar, 2012; Suifan et al., n.d.)

A closer assessment of the correlations between organisational justice and intentions to depart was made based on the data collected from 177 bankers and the findings revealed that organisational justice has a significant negative relationship with intentions to leave with a direct impact on turnover intention through the mediation of organisational commitment (Bakri & Ali, 2015). Additionally, another study investigated and tested the influence of organisational justice on employee tendency to depart among a sample of 323 employees working for airline companies operating in Jordan and revealed that the effect was mediated through organisational commitment and job satisfaction (Suifan et al., n.d.). Another study based on 75 millennial employees working in the public accounting firms in the United States examined the relationship between organisational justice dimensions and workers' propensity to depart. The study revealed that both distributive and procedural justice dimensions had a significant negative association with the professionals' propensity to depart, after controlling for gender and tenure (George, 2014).

Further studies were conducted to examine the relationship between organisational justice and employees' propensity to depart in the Asian settings. Among the studies, one assessed workplace justice in the hospital setting in Taiwan based on the sample of 2268 nurses of which 1417 (62.5%) sufficiently filled the questionnaire and the findings showed that 24.1% of the respondents had low perceptions of workplace justice, implying that they had higher tendencies to abandon their profession (Chin, Guo, Hsieh, Wang, & Shiao, 2017). Another analytical study examined the relationship between the two variables using a sample of 135 nursing staff in a hospital setting in Tehran and

observed a significant inverse relationship between organisational justice, interactional justice, and procedural justice and nursing staff's intention to depart from the hospital (Sokhanvar et al., 2016).

A study conducted in one of the Middle East countries examined the organisational justice dimensions (distributive, procedural and interactional) based on a sample of 148 respondents working in Omani airports and revealed that there is a positive and significant effect on workers' retention (Imran & Allil, 2016). If the existence of organisational justice influences employees to remain with the organisation, its absence also influences them to leave the organisation. A further study investigated the employees' perceptions of the association between distributive justice and turnover intentions in the financial sector setting in Pakistan using a sample of 140 respondents. Results indicated that there are strong negative and significant correlations between the two variables (organisational justice and turnover intentions (Irum et al., 2015). The finding has managerial implications for ensuring fairness in the areas of rewards, benefits, and workloads with the goal of retaining its employees in the organisation.

Another study designed to investigate the impact of organisational justice with its two underlying dimensions (procedural and distributive) on the turnover intentions of 156 sales representatives working for an international electronic chain store based in Turkey demonstrated that there is an inverse relationship between organisational justice and sales representatives' propensity to depart from the organisation (Iyigun & Tamer, 2012). Specifically, the findings showed that the two dimensions of organisational justice (distributive and procedural) were negatively and significantly associated with turnover intention while demographic characteristics of education, tenure, and marital status were positively and significantly related to turnover intention (Iyigun & Tamer, 2012).

The review of literature as shown above indicated that most of the studies that examined the influence of organisational justice on employee propensity to depart were largely conducted in the contexts of other service sectors (e.g., hospitals, financial institutions, transportation service institutions and sales organisations), justifying that a visible gap exists in the literature in relation to the higher education sector. Moreover, geographically speaking, most of the studies were concentrated in the South-East Asian countries and Middle East countries and hence examination of the variables in the context of Africa was largely lacking. Hence, this research was designed to fill this gap in the literature on the relationship between organisational justice and academic staff's propensity to leave, taking the context of three universities in sub-Saharan Africa.

Hence, it is stated that:

H_2: Organisational justice (OJ) negatively influences academic staff's propensity to leave the respective universities in the SSA

3.9.2.3. Job satisfaction (JS) and turnover intentions

The concept of job satisfaction "traditionally has been of great interest to social scientists concerned with the problems of work in an industrial society" (Kalleberg, 1977, p.124). Some early scholars have defined the term job satisfaction as the overall "affective orientation on the part of individuals toward work roles which they are presently occupying underlying that the construct is a "unitary concept" with an equilibrium between the state of satisfaction and dissatisfaction of the person with the dimensions of the work" (Kalleberg, 1977, p.126). Whereas others defined the concept as "a multidimensional concept that includes a set of favourable or unfavourable feelings in terms which employees perceive their jobs (Bowen & Cattell, 2008, p.260). The term job satisfaction can also be broadly defined as "a collection of attitudes, feelings, beliefs, and behaviour one has towards his or her job" (Chiedu, Hapriza, & Ashar, 2017, p.371). In general, it is an attitude one has towards their job, be it positive or negative.

Research on employee job satisfaction was conducted by early organisational theorists and behaviourists. For instance, Kalleberg's (1977) study indicated that job satisfaction is significant due to the following reasons: (1) it is associated with the employee's personal value system and often associated with their dignity as human beings, (2) it is associated with the overall quality of life of the employee having implications on both the physical as well as cognitive health, and (3) it has great influence in enhancing workers' and subsequent institutional performance (Kalleberg, 1977).

Past studies have indicated that job satisfaction predicts employee propensity to depart and the relationship between the two variables has received immense empirical support (Labrague, Gloe, McEnroe-Petitte, Tsaras, & Colet, 2018; Lee, Yang, & Li, 2017; Lee et al., 2017; Nor et al., 2017; Masum et al., 2016; Yanchus, Periard, Moore, Carle, & Osatuke, 2015; Prinn Sukriket, 2014; Kabungaidze, Mahlatshana, & Ngirande, 2013; Olusegun, 2013; Coomber & Louise Barriball, 2007; Hellman, 1997).

A meta-analytic research study examining the link between job satisfaction and intentions to depart showed that the relationship was consistently negative (Hellman, 1997). For instance, a study conducted to examine the influence of both job satisfaction and organisational commitment on employee turnover intentions based on a sample of 117 employees working in Unilever Nigeria PLC witnessed a significant inverse relationship with employee propensity to depart (Chiedu et al., 2017). Further studies based on a sample of 11,726 mental health workers revealed that job satisfaction indeed predicts turnover intention (Yanchus et al., 2015). Another study aimed at examining the reasons why generation Y academics intend to quit from South African higher education revealed that four major factors including "employee engagement, job satisfaction, remuneration, rewards and recognition, and

transformational leadership" are the main reasons for the departure, with job satisfaction being the dominant factor (Robyn & Du Preez, 2013, p.10).

A study conducted in the context of the US municipal police departments examined the influence of voluntary turnover on the productivity of the department. The results supported that notion that decline in satisfaction contributes to voluntary departure which further contributes to the low productivity of the police department in terms of crime control (Hur, 2013). In addition, a systematic review of literature designed to explore the factors that act as antecedents to the propensity of nurse managers to remain in their current positions identified 21 factors that were divided into three main categories: organisational, role and personal. Some of the prominent factors across all the categories that were identified as an outcome of the review include "job satisfaction, organisational commitment, organisational culture, and values, feeling of being valued and lack of them to complete tasks leading to work/life balance". Hence, it can be inferred that job satisfaction is indeed among the factors influencing the intention of the nurse managers to either depart or remain in their current positions (Brown, Fraser, Wong, Muise, & Cummings, 2013). Furthermore, another study involving nurses in South Africa revealed that job satisfaction indeed predicted propensity of the nurses to depart, as did the nurses' age and educational background (Labrague et al., 2018; Delobelle et al., 2011). Further evidence shows that employees with a higher level of job satisfaction have a greater tendency to remain compared to those with a lower level of job satisfaction (Harris et al., 2005). Furthermore, an empirical analysis of a randomly selected 300 scientists revealed that the higher the level of satisfaction with the job, the lower is the tendency of the employees to quit their job (Randhawa, 2007).

Although the concept of job satisfaction and its effect on employee retention in general terms was extensively addressed in the management literature across the globe, little has been undertaken to examine the extent to which the presence or absence of job satisfaction has lead employees to either stay or leave among academics working in the higher education in the SSA. With the presumption that satisfied employees are likely to be committed, creative, and more productive in their institutions than those who are less satisfied which in turn influences their decision to remain within the organisation, this study, therefore, examined the effect of job satisfaction on the intention of academic staff to depart from their respective universities in the SSA.

Hence, the researcher predicted the following hypothesis:

H_3: Job satisfaction (OJ) is negatively related to academic staff's propensity to leave from their organisations.

3.9.2.4. Leadership-subordinate relationship (LMX) and turnover intentions

The relationship between leaders and subordinates has been extensively studied via the "LMX Theory" (Harris et al., 2005) with its roots in "role theory" (Kahn, Wolfe, Quinn, Snoek, & Rosenthal, 1964) and "social exchange theory" (Blau, 1964; Homans, 1958). The LMX theorists assert that the work roles of the subordinates are largely determined by the supervisors.

Based on three motivational forces, Harris et al. (2005) classified the LMX into three distinct levels with each of them having peculiar characteristics: low-quality, medium and high-quality relationships which in turn each have a distinct characteristic in terms of their "levels of trust, emotional support, and related benefits" that subordinates receive within the organisation (Harris et al., 2005).

When examined separately, subordinates with low-quality LMX relationships are characterised by having a relatively higher tendency of leaving or quitting due to the "lack of trust, communication, and other benefits for subordinates" (affective forces) and at the same time they perceive a gloomy future and question their future prospects of being a member of an organisation. The absence of benefits they should receive from their supervisors in the future influences them to think of quitting their membership in the organisation (Harris et al., 2005). Subordinates with a low-quality relationship with their supervisors tend to depart from the organisation as they start looking for opportunities outside the organisation resulting from their feelings of discomfort or due to better expectations for their future careers(Harris et al., 2005). They often tend to experience fewer organisational benefits and outcomes which may influence them to depart from the organisation (Sollitto, Martin, Dusic, Gibbons, & Wagenhouser, 2016). Subordinates with such a low quality level of relationship usually exhibit low levels of trust and emotional support and rarely have access to organisational perks outside their employment contract (Dansereau, Graen, & Haga, 1975; Dienesch & Liden, 1986). Further, they have lower tendencies to depart from the organisation, usually do not have a negative attitude towards the organisation, they are less likely to feel that their future prospect is being curtailed in their current organisations, they do not work as hard as those with a high-level quality relationship and as low level counterparts (Harris et al., 2005) and employees, this category understand that they get better rewards and benefits equivalent to their contributions (March & Simon, 1958)). As opposed to subordinates with low-quality LMX relationship, subordinates with moderate-level LMX relationships develop a state of mind that may stop them from leaving the institution.

The subordinates with high-quality LMX relationships mostly exhibit a relatively better authority in decision making, have comparatively better prospects to advance and receive unconditional assistance and backing from the supervisors and the institutions (Saeed, Waseem, Sikander, & Rizwan, 2014). Subordinates with high-quality LMX relationship get every rewards (both formal and informal), extra advantage over ordinary employees, access to information and the leader, and finally, increased

communication stemming from the relationship (Dienesch & Liden, 1986). As stated in Sollitto et al. (2016, p.77), "employees with high-quality relationships enjoy a host of benefits such as greater trust, enhanced negotiation latitude, which refers to the ability of employees to discuss job-related matters with their supervisors; greater job satisfaction, greater role clarity and job competency, improved information quality, less formality in communication, more breadth and depth of communication, greater use of relational maintenance behaviours; and more frequent engagement in organisational citizenship behaviours; and more comfort articulating dissent". Moreover, subordinates in this category of relationships are relatively privileged compared to the other group of subordinates (low-quality) in terms of having access to the leaders' networks and higher performance ratings which determine their visibility and perceived or actual ease of movement (Harris et al., 2005). Further, it was further argued that the high quality level of relationship between the subordinate and the supervisor enhances performance and achievement, increases job satisfaction and dedication towards the organisation, and subsequently decreases the tendency of employees to depart from the organisation (Gerstner & Day, 1997).

However, as much as there are researchers that strongly argue for the widely accepted notion that there is a linear relationship between LMX and propensity to depart, a few do argue the opposite (Kim, Lee, & Carlson, 2010; Harris et al., 2005). For instance, contrary to the widely accepted notion that the higher level of quality relationship between the subordinate and the supervisor leads to a lower level of turnover; findings by Harris et al. (2005) based on multiple samples (with the number of samples of 402 and 138) showed the existence of curvilinear instead of linear relationships between the two variables. The proponents further asserted that "subordinates in low-quality relationships will be 'pushed' out of the organisation, whereas individuals in high-quality relationships will receive opportunities and/or have aspirations that result in their being attracted to other organisations (being 'pulled' out), ultimately leading to increased turnover intentions" (Harris et al., 2005, p.364). Following the findings of Harris et al. (2005), Kim et al. (2010) conducted a traditional hierarchical regression analyses of two samples (232 frontline workers and 88 supervisors working in the South Korean hospitality industry) and found that the relationship between the variables varies depending on the type of the samples. For instance, the findings showed that the relationship was a U-shaped curvilinear relationship for non-supervisory employees whereas only a linear relationship for supervisory employees (Kim et al., 2010). Despite this finding, the majority of the findings in the literature have presumed that subordinates with a low quality relationship with their supervisors have a higher tendency to depart compared to those with high quality relationship where there is a linear prelateship between the levels of quality relationship (Schyns, Torka, & Gössling, 2007; Bauer, Erdogan, Liden, & Wayne, 2006; Charlotte R Gerstner & Day, 1997). Past studies have also validated that a negative relationship exists between the two variables (Harris et al., 2005).

Hence, the researcher predicted that:

H_4: There is a significant negative relationship between low-quality LMX subordinates and turnover intentions and vice-versa.

3.9.2.5. Rewards and benefits (R&B) and turnover intentions

In this context, the term rewards and benefits implies all compensation packages offered by the organisations in response to the contribution of the employees and its effect on the employee turnover intentions. It measures the level of adequacy of the rewards and benefits, extent of happiness of the employees regarding the various benefits offered by the organisation such as leave, health, retirement, etc.; the extent to which the pay and benefits are attractive to retain the highly qualified and top talent in the institutions, perception of the level of satisfaction of the employees regarding their pay when compared to the effort they put forward in the organisation.

Prior studies have provided mixed findings regarding the effect of pay and benefits on the turnover intentions at an organisation. However, it is widely believed that employee dissatisfaction with the overall pay and benefits is positvely correlated with the emplyees' tendency to depart. In this respect, a study conducted to examine the reasons behind the departure of generation Y academics from South African universities emphasises that remuneration, reward, and recognition are among the factors contributing to the departure (Robyn & Du Preez, 2013).

A descriptive survey examined the influence of compensation practices on teachers' turnover in the Tigray region of Ethiopia, based on 259 purposively selected teachers drawn from a target population of 770 summer-in-service students in Adigrat University. The study employed 28 Likert scale questions (self-reported) for measuring both financial and non-financial compensation (basic pay, financial incentive, benefits, allowance, working condition, job design, involvement, and recognition) as well as seven Likert scale questions aimed at measuring turnover construct. The findings revealed that the teachers were dissatisfied with compensation practices in the education sector and that is what influenced them to shift their qualification and refrain from upgrading themselves in the same sector (Weldeyohannes, 2016).

A stepwise regression analysis was done to determine the relationship between HRM practices and turnover intention based on 358 academic staff members working in the three public universities in Ethiopia. The participants were selected from each generation at the universities and based on their input, results showed that compensation and supervisory support were the two HR practices out of six to significantly influence the decision of the faculty members to either remain or leave whereas the remaining four factors failed to influence turnover intention (Regassa & John, 2016). Another study in the same country at a different university revealed that inadequate salary preceded by bad work

environment and poor management and leadership were cited as some of the key reasons for the intention of academic staff members to leave Madda Walabu University in Ethiopia (Ibrahim et al., 2017).

An empirical study based on a sample of 295 (113 former and 182 existing) academic staff working in an Ethiopian public university pinpointed that economics factors (inadequate salary and lack of opportunities, such as advancement and fringe benefits), among others, are the reasons for the teacher turnover at Ambo University of Ethiopia (Minda, 2015).

Another study based on a purposively selected sample of 86 employees (existing and exiting) and three department heads working at a philanthropic and religious institution revealed that discontent with pay structure, maladministration, unfair rewards and promotion systems were some of the key reasons behind the tendency to depart or the actual departure (Melaku, 2014). Other studies have also witnessed similar findings in that total rewards are inversely related to employees tendency to depart or quit (Cao, Chen, & Song, 2013).

Based on the review of literature, the researcher predicted that:

H_5: Rewards and benefits (R&B) are negatively related to propensity to leave the organisation.

3.9.2.6.Organisational citizenship behaviour (OCB) and turnover intentions

The effect of OCB on the success and effectiveness of organisations has been widely researched by a number of scholars (Chin, 2015). Researchers contended that organisations benefit from employees' willingness to go the extra mile to serve something beyond their job requirements and thus to contribute to their organisations (Sharoni, Tziner, Fein, Shultz, & Zilberman, 2012).

The term OCB is well versed by Organ (1988, p.4) as follows:

> "Discretionary individual conduct, not directly or explicitly recognized by the formal system of compensation contributing to the general good functioning of the organisation that does not arise from the prescribed role or tasks of the job, in other words, the specific terms of a contract between employees and organisations; this behaviour arises rather from personal choices, such that its omission is not generally understood as punishable"

This definition was widely adopted among researchers on the subject. Furthermore, OCB can be conceptualised as informal but beneficial behaviour portrayed by workers in an organisation which is beneficial to both the employees and the organisation. Such behaviours are widespread, prevalent and

commonly practised in work settings such as: extending help and assistance to a co-worker, assisting a newly employed member of staff to induce into the organisation, demonstrating a considerable degree of adaptability by enduring unnecessary or unreasonable demands, offering innovative ideas to organisations, working extra hours at the time of need or protecting the image of the organisation, etc. It also improves the quality of service, increases the efficiency and the performance of the organisation whereas it reduces the costs (Premchandani, 2017). From the above definition, one can gather that OCB is simply the sense of citizenship behaviour that employees display in the workplace; behaviour that is flexible, adaptable, and positive and not part of the contractual agreement and the job requirements.

Historically, OCB can be measured using five dimensions: Altruism which refers to the discretionary behaviour where an employee willingly helps others complete their task under unusual circumstances to increase group efficiency; courtesy which refers to the discretionary behaviour exhibited by an employee with the objective of preventing job-related problems with colleagues which in turn reduces intergroup differences and ultimately diminishes the time to resolve a conflict; conscientiousness which refers to the discretionary behaviour manifested by employees by going the extra mile to uphold the rule of law within the organisation in the form of obeying attendance rules as well as time, etc.; sportsmanship which refers to the behaviour exhibited by employees by tolerating abilities and by avoiding complaints, grievances, etc. which would boost the morale and motivation of the workgroup and consequently decrease employee turnover (Organ, 1988; Podsakoff & MacKenzie, 1997); and civic virtue which refers to behaviour exhibited by individual employees in terms of responsibly participating in meetings and functions and voluntarily serving on committees (Premchandani, 2017; Sharoni et al., 2012; Organ, 1988). In general terms, employees with 'citizenship behaviour' probably manifest the following behaviours in the workplace:

"Providing support to a colleague, helping a recently recruited employee to settle into the organisation, demonstrating a degree of flexibility by tolerating requests deemed to be excessive or unreasonable, or defending the image of the organisation in a discussion are not neutral forms of behaviour, given the frame of mind they suggest and their positive impact on the work environment" (Paillé, 2013, p.769).

The social exchange theory argues that employees' tendency to manifest civic behaviour is the outcome of their satsfaicatioin with the support and fair treatment they get from the employers (hence, reciprocity between the employer and the employee) (Paillé, 2013). Empirical evidence has been that most of the studies on OCB in the past have focused on its antecedents (Hakim et al., 2014; Kim, Park, & Chang, 2011; Schappe, 1998; Moorman, 1991; Bateman & Organ, 1983; Jahangir, Akbar, & Haq, 1983), implying that there have been a limited number of investigations to examine the influence of OCB on turnover intentions (Khalid, Nor, Ismail, & Razali, 2013; Sharoni et al., 2012; Paillé & Grima,

2011; Tsai & Wu, 2010; Coyne & Ong, 2007). Moreover, compared to the widely researched constructs including organisational commitment and work satisfaction in predicting employees' propensity to leave an organisation, OCB is a relatively recent phenomenon in addressing employee retention (Paillé, 2013). Chen (2005) as cited in Paillé (2013) argued that OCB strongly impacts employee propensity to depart from their job and thus impacts voluntary turnover.

Further evidence revealed that there is an inverse relationship between OCB and employee propensity to depart in various settings. For instance, a cross-cultural examination of the impact of OCB on employee propensity to depart was conducted in large surgical instrument production companies based Malaysia, Germany and England. The sample comprised 85 workers from Malaysia, 46 from Germany and 25 from England and results revealed that, overall, all OCB dimensions with the exception of altruism supported the notion that a significant relationship exists between the variables, with the sportsmanship dimension exhibiting the strongest association (Coyne & Ong, 2007). This is in line with the widely accepted assertion that those employees with a sense of OCB are more likely to remain within their organisations than those who do not have a sense of citizenship behaviour. In this regard, the study has showed that "employees who show lower levels of OCB are more likely to report an intention to leave the organisation than those showing higher levels of OCB" (Coyne & Ong, 2007, p.1092). In addition, the study also concluded that the influence of culture on the relationship in the contract cannot be undermined, across the three countries that were under study (Coyne & Ong, 2007). Moreover, another study conducted in this regard, targeting 1,200 former graduates of a business school in France, received a usable response from 355 graduates with French citizenship. With the exception of altruism, which exhibited no association with the propensity to depart both from the organisation and the job; the rest of the OCB dimensions such as sportsmanship, civic virtue and helping others emerged as the strongest predictors of the propensity to depart from the organisation as well as their current job (Paillé & Grima, 2011).

A study based on the data collected from 450 service sector employees using a structured questionnaire with the aim of examining the connection between OCB and intention to quit witnessed the existence of an inverse relationship between OCB dimensions and intention to quit (Premchandani, 2017). The findings further revealed that a high level of negative correlation exists between courtesy and propensity to quit followed by civic virtue, altruism, and sportsmanship (Premchandani, 2017).

Another study by Chen, Hui, and Sego (1998) empirically examined the strength of the relationship between OCB dimensions and employee turnover, based on the information obtained from 205 supervisor-subordinate dyads across 11 companies in the People's Republic of China. The results provided considerable support that subordinates with low levels of OCB such as altruism, sportsmanship, and conscientiousness were more likely depart from their current institution compared to those demonstrating high levels of OCB (Chen et al., 1998).

A survey study based on the data collected from a group of 159 employees working for the Malaysian Multinational Corporation was conducted with the objective of examining the role of OCB in determining turnover intention among generation Y employees. Results indicated that the sportsmanship and civic virtue dimensions of OCB are significantly and inversely related to employee propensity to depart (Khalid et al., 2013).

A quantitative study was conducted based on information obtained from 100 workers of a particular restaurant and with the objective to examine the impact of organisation citizenship behaviour (OCB) dimensions on workers' job satisfaction, commitment and propensity to depart. The findings indicated that the dimensions are positively correlated with job satisfaction and job commitment, whereas they are inversely related to employees' propensity to depart from the organisation (Pivi & Hassan, 2015).

An analysis of empirical research was done with the objective to investigate the relationship between high-involvement HRM practices and turnover intentions (in which organisational citizenship behaviour is among the ones). The study was based on survey data from 394 respondents from the members of a Canadian-based information processing society and findings demonstrated that, among others, there is a significant and inverse relationship between OCB – helping behaviours and propensity to depart (Pare & Tremblay, 2007).

Therefore, the researcher predicted that:

H_6: OCB is negatively related to propensity to leave the organisation.

3.10. CAUSES OF BRAIN DRAIN

The exodus of human capital from Africa and in the context of SSA is largely informed by the complex and dynamic interaction between the push and pull factors (Hollyman, 2006; Shinn, 2008). The pull factors are those at the destination countries that attract skilled people particularly from countries that are economically more affluent, whereas the push factors are the those factors in the source countries such as crime and security matters, war and conflict, political instability or economic matters that negatively influence the highly skilled professionals to decide or intend to leave their countries.

A recent study using a meta-ethnographic synthesis with the goal of exploring the factors influencing the health workers' decisions to migrate from seven African countries revealed that "struggle to realise unmet material expectations of self, family, and society; strain and emotion, interpersonal discord, and insecurity in workplace; fear from threats to personal or family safety, in and out of the workplace; absence of adequate professional support and development; desire for professional prestige and respect, and conviction that hopes and goals for the future will be fulfilled overseas" (Blacklock, Ward, Heneghan, & Thompson, 2014, p.103). From this, it is understood that the brain drain phenomena is

the result of the interactions of factors of which some are persistent and others are amenable to change. By improving the latter, the migration situation of healthcare professionals from Africa to the other parts of the continent particularly to the northern countries can be improved.

Another study on the migration of healthcare professionals from SSA revealed that "health workers or other highly skilled and educated professionals" migrate due to three major but related reasons: "financial motivations, professional development concerns, and personal and family reasons" (Özden, 2016, p.137). Financial motivations come up front in the migration process of health workers and other professionals from Africa. The existing extremely high wage discrepancy between economically poor countries and the economically rich countries is one of the most powerful drivers of the intention to migrate among both the health workers and professionals in Africa in general and SSA in particular. Thus, the attractive salary paid in the OECD countries is one of the most powerful reasons for the departure of African doctors to migrate to the northern countries (Özden, 2016) (see Figure 3.1).

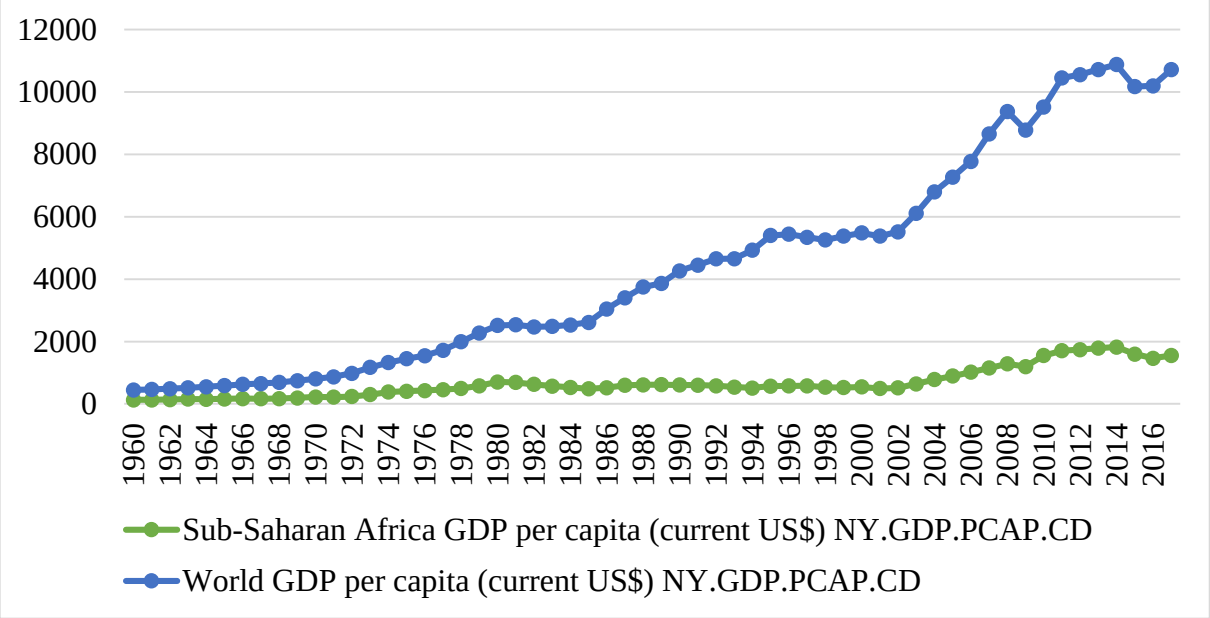


Figure 3.1: Comparison of average income per capita between the world and the SSA

Source: Data from database: World Development Indicators (Last Updated: 07/25/2018) (Retrieved from https://data.worldbank.org/indicator/NY.GDP.PCAP.CD on 09 August 2018)

The other reason is related to professional advancement opportunities resulting from the lack of appropriate facilities and infrastructure that hamper their professional achievement and productivity (Özden, 2016). African health workers and doctors, in particular, are forced to practice with below standard infrastructure and facilities but are obliged to deal with heavier and more dangerous healthcare burdens which in turn impacts their effectiveness, reduces their productivity and demoralises them (Özden, 2016). The healthcare facilities are structured in a way that enhances the productivity of the physicians in the developed countries and act as an incentive for African doctors to

migrate in order to practice their professions at an advanced level. The third major reason, according to the findings, refers to personal reasons. Personal reasons such as searching for better opportunities for their children – "better physical, educational and financial opportunities for their children" - are mostly cited as alternative reasons for the migration of doctors from Africa (Özden, 2016, p.139).

The most dominant push factors for the migration of highly skilled professionals from Africa are war or conflict, health risks, and political instability (Baruch et al., 2007; Kana, 2010; Tettey, 2006). Moreover, the unprecedented globalisation phenomenon coupled with the lack of enabling working environments in the home countries pose substantial challenges to the majority of African higher learning institutions vis-a-vis retaining their knowledgeable, well-educated, talented and skilled academics (Teferra & Altbach, 2004; Tettey, 2006). At the macro level, political, socio-economic, cultural, globalisation and other factors contributes to the departure of highly skilled professionals (Baruch et al., 2007). For instance, in the context of South Africa, an empirical study, based on 29 of a group of 43 potential respondents of South African medical doctors who relocated to overseas destinations, revealed that financial reasons were the most significant driving force for departing followed by working environment, high crime rate and violence in the country (Bezuidenhout, Joubert, Hiemstra, & Struwig, 2009). In the context of Ethiopian higher learning institutions, a study by Semela (2011) revealed that the brain drain is mainly caused by economic and political reasons.

A study targeting South African health workers revealed that **"**poaching by the private sector" OR "active recruitment" by the richer countries of the scarce skills from developing countries is one of the reasons why South African medical doctors are moving to join the private hospitals. The private hospitals justify such active recruitment stating that it is better to retain medical doctors within the country instead of them leaving and attributing the phenomenon to the poor working conditions in the public hospitals. Some argue that the private hospitals, through their marketing departments, are continuously 'poaching' physicians which in turn 'poach' nurses (Labonté et al., 2015). A similar notion was repeated in a study on one of the Caribbean countries, Jamaica, that 'active recruitment' of the richer countries is tempting the health workers to leave their countries (Lofters, 2012). Poaching of professionals is one way through which rich countries attract healthcare professionals from less privileged regions such as the SSA. For instance, a commentary under the title "Brain Drain of Health Care Workers: Causes, Solutions and the Example of Jamaica" revealed that "41% of migrant nurses in Britain reported moving there primarily because of recruitment strategies" (Lofters, 2012, p.e376). The comments further stated that "approximately one quarter of practicing physicians working in the US, the UK, Canada, New Zealand are foreign-trained, and 40-75% of them are from lower-income countries" (Lofters, 2012, p.e376)

Others also argue that workload which leads to job stress is another reason why South African health workers leave for abroad. Evidence has shown that South African physicians are more stressed than

physicians working in the UK or the United States (Labonté et al., 2015). Sometimes brain drain itself may create another brain drain (Lofters, 2012). The departure of the health works leads to a shortage of workforce, having implications on those colleagues who are left behind in terms of workload which further creates "a breeding ground for frustration, discontentment, and burnout" (Lofters, 2012, p.e377).

A recent empirical study designed to analyse the factors contributing to employee staff turnover in small and micro enterprises in Cape Town, South Africa revealed that remuneration, working conditions, working hours, management, recruitment, training, and Gender were some of the factors affecting employee turnover (Warden, Han, & Nzawou, 2018).

In the same manner poor working conditions in the home countries, apart from the pull factors abroad, are often cited as the main reasons for the migration of highly educated professionals from economically poor countries to economically rich countries without exception to the health workers (Lofters, 2012). Many health workers leave their countries of birth due to a number of reasons such as "weak economies, weak public healthcare systems with poor working conditions" (Lofters, 2012, p.e376). Sometimes uneven development in this globalised and technologically driven world may tempt the health workers to emigrate to developed countries where they may get a much higher salary to the extent of 24 times of the local salary with a relatively safer environment, "better infrastructure, a plethora of resources and more intellectual stimulation" (Lofters, 2012, p.e377). Another study conducted in the context of Indian healthcare revealed that health workers primarily leave due to push factors such as living and working conditions (Walton-Roberts et al., 2017).

Income has also been cited as another reason for the departure of skilled professionals. In the context of Indian healthcare, income is the dominant factor that influences the decision of the healthcare workers to emigrate (Walton-Roberts et al., 2017). With respect to income, professionals compare their income in three ways: they compare their income with those in their own countries, income needed to lead a decent life in their country and their income compared to their expectations to earn. These three income-related variables influence their decision (Walton-Roberts et al., 2017). A key informant interview by the same research team revealed pay, preference towards geographic location, and the context of the work as major causes of the departure of healthcare workers. In addition, the employment situation (a shift from permanent to temporary or contractual based) and the lack of opportunities for specialist training and subsequent professional development, especially for doctors, were other factors influencing the departure of the health workers (Walton-Roberts et al., 2017).

An atheoretical case study conducted in Ghana examined and pinpointed five major factors driving the exodus of human capital, which included but was not limited to economic shocks, political instability, deteriorating social services, lack of hope on the content and lack of prospect for development

(Amponsah, 2012). Two of these factors (political instability and economic hardships) were found to be the dominant denominators explaining the departure of highly skilled professionals despite the relatively stable democracies in Africa. Two sectors were mainly hit by the brain drain phenomenon in Ghana were healthcare workers and educators from Ghana (Amponsah, 2012).

In brief, contrary to the already established notions, new developments and perspectives are also surging on the factors driving migration in Africa. In the past, African migration was essentially attributed to poverty, violence, and underdevelopment (Flahaux & Haas, 2016). However, contrary to the conventional interpretations of poverty as the main drivers of migration in Africa, the findings have indicated that "migration out of Africa seems rather be driven by the processes of development and social transformation which have increased Africans' capabilities and aspirations to migrate, a trend which is likely to continue in the future" (Flahaux & Haas, 2016, p.23).

3.11. IMPACTS AND CONSEQUENCES OF BRAIN DRAIN

The consequences of brain drain in Africa are currently being researched (Boyo, 2013; Odhiambo, 2013; Osaretin & Eddy, 2012; Shumba & Mawere, 2012; Wosyanju, Kindiki, & Kalai, 2012; Tessema, 2010). Recently, it has become customary to read contrary findings on the impact of brain drain in Africa. There are at least two theories in this regard: the divergent paradigm and the convergence school of thought (Osaretin & Eddy, 2012).

The divergent paradigm elucidates that the loss of talent through brain drain severely impacts and causes substantial setbacks for the renaissance of Africa (Benedict & Ukpere, 2012; Gibson & McKenzie, 2011; Nabawanuka, 2011; Canibano & Woolley, 2010; Kana, 2010; Tessema, 2010; Baruch et al., 2007; Nunn, 2005; Shinn, 2002). More specifically, the exodus of human capital decreases the officially low number of talented human resources accessible in African nations and required for their advancement. This in turn lessens the quantities of dynamic and inventive individuals (regardless of whether they are business visionaries or scholastics), it increases reliance on foreign experts at a very higher cost, it slows technology transfer and adaptations, it widens the gap between the SSA countries and economically more affluent countries, and it adversely impacts the region's scientific yield and income lost in the form of tax revenues which otherwise would have been contributed to the national GDP.

On the contrary, the convergence school of thought portrays that the departure of human capital is beneficial to both the countries of origin and destinations. In this line of argument, Easterly and Nyarko (2008) stated that the extent of brain drain in Africa is exagerated. The benefits the home countries are gaining in the form of remittances that the migrants inject into the national economy were largely underestimated; again in the form of new human capital formation and opportunities for collaboration

with home institutions in the form of research engagement were largely underrated (Gibson & McKenzie, 2012; Franck & Owen, 2009; Gibson & Mckenzie, 2010; Grigolo, Lietaert, & Marimon, 2010; Kana, 2010; Rappoport, 2004). However, the negative consequences/impacts of brain drain appear to outweigh the positive ones (Gibson & McKenzie, 2012; Benedict & Ukpere, 2012; Gibson & Mckenzie, 2010). It is argued that the loss of qualified and competent professionals to developed countries has had an adverse effect on the socio-economic, political, demographic, technological and scientific progress of Africa, leading to a widening gap in the contribution of Africa to the livelihood of the society that produced those professionals. This phenomenon has a damaging effect on the sustainability and global competitiveness of African universities (Mutula, 2009). The next sub-section discusses the impact of skilled emigration from the perspectives of the sending countries.

3.11.1. Economic impact

The impact of brain drain on the sending countries, such as the African countries, is seen through different windows by different scholars. Some argue that as much as the departure of highly educated professionals weakens the local knowledge networks, they may benefit those innovators and entrepreneurs who are left behind in having access to unprecedented knowledge from abroad (brain bank) (Agrawal, Kapur, McHale, & Oettl, 2008). In this regard, countries such as China and India are often cited as best examples in reaping the fruits of brain gain and brain circulation (Gibson & McKenzie, 2012). However, when such mobility is compared with the countries of the globally rising economies, including China, India and other selected Asian economies, the impact is huge for the African countries. The African countries in general, and SSA in particular, are known for their poor economies and infrastructure and they rarely attract back those highly skilled migrants who left the countries. According to Gibson & McKenzie (2012), the countries benefit from the migration of skilled professionals in various ways, including 'return brain drain', income gains in the form of remittances, postgraduate education and access to advanced training abroad. However, participation in the form of trade and foreign direct investment rarely happens due to the lack of a stable political environment and poor infrastructure that retain the investors. In addition, although there is substantial flow of knowledge via both current and return migrants regarding the available opportunities abroad, the net knowledge shared among local governments and businesses seems insignificant (Gibson & McKenzie, 2012). The economic costs such as taxation (e.g. income tax) also have a bearing effect on how countries benefit from the knowledge diaspora(Gibson & McKenzie, 2012). Although the positive role of remittances by those who left their countries is indisputable, recent findings have revealed that all who emigrate are either not intending to remit at all or to remit a very small proportion of their income. They are thus often benefiting only families and households in the form of meeting basic necessities (Labonté et al., 2015).

An empirical study designed to assess the effect of the departure of human capital from developing countries based on the data taken from 90 developing countries highlighted that the exodus of highly skilled professionals impedes the economic growth of these countries. This might lead to a potential human capital loss in the sending countries (Ngoma & Ismal, 2013), suggesting the net impact of remittances yet to be studied. Despite the benefits, its effect on the widespread poverty level in sub-Saharan Africa outweighs the benefits. The existing reality, for instance, shows that more than 40% of the people living in the SSA earned less than 1.90 US dollars daily in 2012 (United Nations, 2016). Further reports have indicated that more 50% of the adult population in SSA was exposed to modest or chronic food insecurity in 2015 (United Nations, 2016). In addition, the largest number of undernourished people exists in the region (220 million) compared to 15 million in the developed world (United Nations, 2016)**.** Although there is a slight improvement in reducing the poverty level from 2002 to 2012 (see Figure 3.2), still the region is the most poverty-stricken region compared to the rest of the world, calling for a multilevel intervention through innovative and technology-driven practices. This, in turn, requires the engagement of highly skilled professionals in the economy.

3.11.2. Impact on the health service delivery and healthcare system

The exodus of health workers from lower-income countries to economically more affluent countries does nothing but deplete the already strained workforce and further contributes to the deteriorating health delivery system in the continent (Blacklock et al., 2014). The emigration of health professionals, such as physicians, from SSA to economically rich countries, such as the US, has adversely impacted the "doctor-to-population ratio" of Africa (Hagopian, Thompson, Fordyce, Johnson & Hart, 2004) despite the existence of a large proportion of the overall disease burden in the continent (Blacklock et al., 2014). The phenomenon further aggravates the global health workforce disparity which may be damaging to the healthcare systems of the countries of origin (Hagopian et al., 2004). There are the indicators of the poor health service delivery system to those who are left behind in sub-Saharan Africa. Despite the globally declining trend in the prevalence of certain diseases across the world, it is evident in Africa, according to secondary sources, that close to 2.1 million people became newly infected with HIV and an estimated 214 million people contracted malaria in 2015 only (United Nations, 2016). The data revealed that about half of the global population is at risk of malaria infection in which the SSA accounted for about 89% in all the cases in 2015 (United Nations, 2016). The departure of the health workers is thus further contributing to the already scarce and deteriorating healthcare system in the region. Recent studies on the consequences of the migration of health workers in two BRICS countries (India and South Africa) revealed that the impact of the migration of health workers was largely perceived as negative despite some positive benefits in the form of human capital formation and remittances (Walton-Roberts et al., 2017; Labonté et al., 2015). One of the critical consequences is that it creates a shortage of staff (Castro-Palaganas et al., 2017; Walton-Roberts et al., 2017; Labonté

et al., 2015; Jonathan Crush, Chikanda, Bourgeault, Labonté, & Murphy, 2014). It is widely believed that the healthcare professionals are the prime input in the healthcare delivery system.

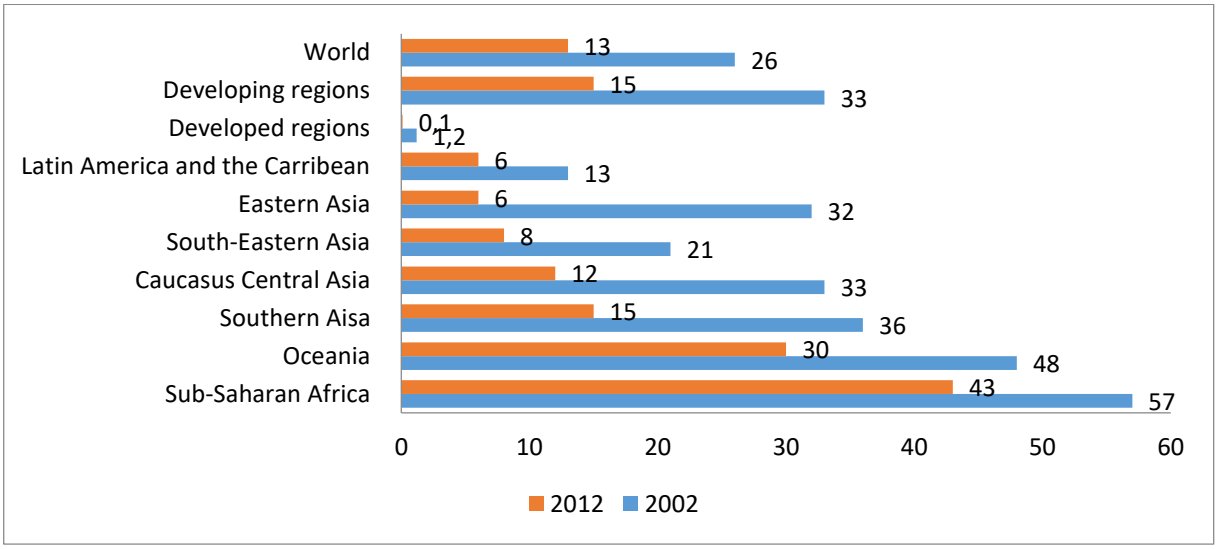


Figure 3.2: Proportion of the population living below 1.90 US dollars a day, 2002 and 2012 (Percentage)

Source: Adapted from the United Nations (2016, p.12) sustainable development goals report. Retrieved August 9, 2018 from http://www.un.org.lb/Library/Assets/The-Sustainable-Development-Goals-Report-2016-Global.pdf.

3.11.3. Technological impact

The existing gap in research, development, and innovation between the developed and less developed countries, among other things, can be attributed to the exodus of human capital from economically less developed countries. The developed economies continue to be more innovative and the less developed economies become poorer and poorer. For instance, the global investment in research and development (R&D) has increased tremendously from 732 billion US dollars in 2000 to 1.7 trillion US dollars in 2013 (United Nations, 2016). Whereas the developed countries allotted close to 2.4% of their GDP to the R&D in 2013, the average percentage of GDP invested by least developed and landlocked countries stood at about 0.3% which is very small (United Nations, 2016).

3.11.4. Psychological and social impacts

In most brain drain literature, the subject of the study, in other words, the migrants, were excluded from the equation of the study on the mobility of highly experienced academic staff (Boyo, 2013). Boyo (2013) emphasised that the emigration of educated Africans to the global north is rooted in a historical context of ‘slavery’ and ‘colonialism’. As a result, there is a lack of cultural barriers in the integration process and hence most of the migrants are living physically aboard, but their hearts are always at home. As much as there are those who negate this notion, some assert that the impact of

brain drain in Africa is hardly explained only through cost-benefit analysis related to remittances or the loss of investments, highlighting that it has significant social impacts on the migrants themselves (Boyo, 2013). Apart from other direct costs, brain drain also has negative social effects (OECD, 2007). Boyo (2013) further emphasised that brain drain should be understood beyond its impact on both the source and the destination countries and it should not be considered as a mere movement of 'brains' from one place to another. Additionally, it is rather the movement of social beings from one particular context to another carrying its [people's] own history, stories, memories, dreams, and aspirations.

3.11.5. Quality of education

Brain drain contributes to the deteriorating quality of education in Africa. The loss of highly skilled professionals does mean that there is a loss of best mind that is able to create and nurture entrepreneurs and it often leads to the scientific and technological gap (Odhiambo, 2013; Shumba & Mawere, 2012). Human capital is a key input in the higher education teaching-learning process and its departure negatively impacts the delivery of quality education in African universities. Moreover, the departure of qualified and skilled academics from higher education has a bearing impact on the capacity of the respective universities to run the postgraduate programmes. The lack of proper running of the postgraduate programmes in most African universities can be attributed, among others, to the lack of qualified academic staff. A recent study designed to examine the "causes, consequences and policy responses" of the emigration of health professionals from South Africa revealed that the phenomenon impacts, among others, training institutions through the creation of scarcity of qualified academics having an implication in the effective implementation of postgraduate programmes in the schools (Labonté et al., 2015).

3.12. BRAIN DRAIN MITIGATION STRATEGIES IN AFRICA

The problem of brain drain is multifaceted. There is no hard and fast rule to overcome the challenge which is threatening the very survival of the content. The problem needs a collective approach at international, regional, national and local institutional levels to slow down the increasing trend of the departure of highly skilled and experienced faculties from the higher learning institutions in Africa (Labonté et al., 2015; Lofters, 2012; Teferra, 1997). Some of the initiatives ought to be taken at an institutional level such as developing sound human resource management policies and strategies and improving non-financial incentives in the workplace in addition to other regional, international and transnational initiatives to curb the trend. In particular, the following three key initiatives need to be taken at the macro level to improve the situation.

3.12.1. International initiatives

The challenge of brain drain cannot be solved by the low and middle-income countries by themselves. Rather it requires the intervention and support of international agencies (e.g. the World Bank, IMF, UNDP, IOM, EU, etc.) as well as the global community to curb the trend (Lofters, 2012). One of the strategies to curb the continued depletion of skilled professionals from developing countries threatening the sustainability of public service delivery has to do with limiting the recruitment of these professionals from the highly vulnerable countries through the adoption of a non-binding code by WHO member states (Labonté et al., 2015; OECD Health Statistics, 2015; Moullan, 2014; Lofters, 2012). This should take place without compromising "Article 13.2 of the Universal Declaration of Human Rights" and the Citizen guaranteeing "the right to leave any country, including his own, and to return to his country" and, therefore, the right to remain internationally mobile (Moullan, 2014, p.6). For instance, initiatives taken by international organisations such as the United Nations Development Program (UNDP) and the International Organisation for Migration (IOM) during the late 20th and early 21st century to fill the existing human capital gap in Africa (Teferra, 1997) can be cited as best examples. Furthermore, IOM has employed repatriation strategies (both permanent and temporary return) in the form the "Return of Qualified African Nationals (RQAN) program and Migration for Development in Africa (MIDA)" in Ghana to mitigate the effect of brain drain (Amponsah, 2012).

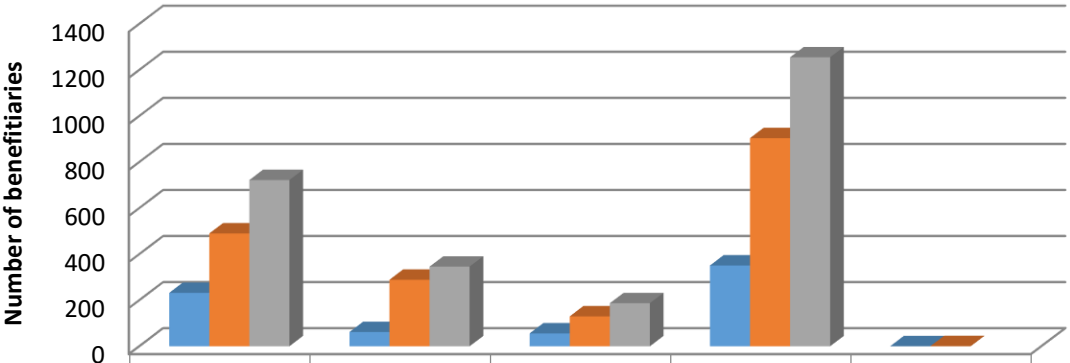
In addition, a number of multilevel strategies (global, bilateral and domestic) were pursued by some African countries (e.g. South Africa to curb the migration of healthcare professionals and to address the scarcity of such professionals in the country) (Labonté et al., 2015). Among the global agreements signed by South Africa to prevent the challenge of losing its health workers were "Commonwealth Code (2003), Health Worker Migration Initiative (2007) and the WHO Global Code of Practice on International Recruitment of Health Personnel (2010)". In addition, the country has also entered into a bilateral agreement to recruit health professionals from various countries including "Tunisia, Iran, and Cuba. Some of these bilateral agreements were UK/South Africa MOU (2003), Cuba (1996), Germany, Tunisia (1999 and 2007 technical agreement), Iran (2004), and the US PEPFAR/Medical and Nursing Education Partnership Initiative (2013), which supported Medical Education and Nursing Education Partnership Initiatives in the country". The establishment of an international code of conduct on 'ethical recruitment' is something appreciated through its implementation, largely limited and done at the will of the countries since it is not binding one (Lofters, 2012). However, many argue that such international codes of conduct to overcome 'selective recruitment' of highly skilled and scarce professionals from vulnerable regions were not found to be effective as the codes were not ratified by many countries. Hence, regional initiatives are critically needed to arrest African scholars within the region.

3.12.2. Regional level initiatives

African leaders can deal with the challenge of the emigration of its highly educated nationals through the establishment of a conducive socio-economic, political and technoligical environment for the citizens through respect for human rights, improvement of good governance to fight corruption, ensure political stability and security, and making available low-interest loans (Mutume, 2003). The author further iterated that the countries affected by the problem of migration of skilled professionals need to address the factors that originally contributed to the phenomenon. The economic and political crises that are prevalent in most African countries, including unstable politics, deteriorating economic conditions, increased rate of unemployment, violation of human rights, war and insufficient social services are the reasons that dissuaded the emigrants from returning back to their countries of origin (Mutume, 2003). In this respect, African leaders need to intervene by creating macro enviromental settings that do not harrass or prosecute political dissents and open up political spaces to accommodate freedom of speech and criticism (Mutume, 2003). Addressing these challenges requires the governments to adopt the principles, cited by the UNDP, including (a) accountability, (b) transparency, (c) the rule of law and (d) citizen participation (Shumba & Mawere, 2012). To this end, a continuous policy debate has to be organised at regional level through the facilitation of organisations such as the AU, ADB, United Nations UNECA and UNDP with the objective of curbing the aggressive outflow of talented Africans to other developed countries curtailing the interest of the African countries (African Union, 2018).

For instance, the Intra-Africa Academic mobility, a joint initiative between African Union and European Union since 2010 with the aim of retaining talent within Africa was one of the typical examples of regional level efforts made to retain talent (academics and researchers) within the African continent (African Union, 2018).The initiative involved about 29 partnerships with 97 participating higher education institutions from 38 member states participating in the academic mobility scheme.

The distribution of participating universities indicated that the majority of the 97 universities were from South Africa (9), Uganda and Morocco (6 each), Nigeria, Kenya and Ethiopia (5 each), Ghana, Tanzania and Tunisia (4 each) and the rest involved less than three universities to the highest and none to the least. As we can see from this figure, South Africa is the number one destination for such international students (African Union, 2018). Although the initiative has the overall goal of accelerating the 2063 agenda of the African Union of the regional integration in its the broadest sense, it has also the goal of mitigating brain drain and promoting brain circulation within Africa in a way that it contributes to the development of the continent (African Union, 2018). Further analysis of the first round report of the joint initiatives revealed that about 1255 individuals (722 Master students, 346 Doctoral candidates, and 187 staff) from 43 member states have benefited from mobility scheme (see Figure 3.3).



	Masters Students	Doctoral Candidates	Staff	Total	Percentage particiaption
Female	232	62	56	351	28%
Male	490	289	130	904	72%
Total	722	346	187	1255	

Figure 3.3: Beneficiaries of the Intra-Africa academic mobility scheme

Source: Adapted from African Union (2018)[4]

As shown in Figure 3.3 above, the number of female participants was much lower than the number of male participants. Furthermore, the number of master's student participants was much higher than the number of doctoral student participants. Since the objective of the scheme is to enhance research and development in the continent, it is imperative for the union to provide priority to research, training, and development at tertiary degree level so as to overcome the chronic scarcity of qualified and skilled academic staff in the higher learning institutions in the continent.

Furthermore, the regional distribution of the beneficiaries as stipulated in the report revealed that the majority the participants were from Cameroon (149), Madagascar (105), Ethiopia (96), Benin (83), Ghana (82), Burkina Faso (74), Uganda (72), Senegal (69), Nigeria (64), Cote d'Ivoire and Kenya (51 each), Rwanda (46), Tanzania (44) and the rest are less than 40 participants (African Union, 2018). Moreover, the fields of specialisation that are relevant to the SDGs and Agenda 2063 were considered in the Masters and Doctoral studies. These include agriculture and food security, natural sciences, engineering, infrastructure and energy, medical sciences, governance and social sciences (African Union, 2018).

The implementation of the initiative has faced a number of challenges as indicated in the first round report of the commission. These challenges range from limited credit-transfer and recognition of

[4] The data was adapted from the first progress report of the chairperson of the commission on academic mobility scheme in Africa presented on the meetings of the permanent representatives' committed held on 29th of March 2018 in Addis Ababa. Retrieved from https://au.int/en/documents/20180329/first-progress-report-chairperson-commission-academic-mobility-scheme-africa on 09 August 9, 2018.

partial studies for short-term mobility, due to variations in education systems across Africa; issuance of student and faculty visa: visa permit procedures in some countries were cumbersome and frequently delayed the start of the study period; and• lack of sustainable funding from the member states for an academic mobility scheme to launch new calls for the coming years. There is an increasing concern due to external funding dependency and limited contribution of African Governments (African Union, 2018).

3.12.3. Domestic level initiatives: Experience of some African countries

Many African states have taken initiatives to attract their intellectual capital living abroad through the provision of different benefits such as free housing, duty-free status, and other benefits (Teferra, 1997). For instance, the Ghanaian government has taken four major initiatives to retain highly qualified professionals in the country through "legislative policy measures; Incentive Programs; Diaspora Linkages; and Repatriation" (Amponsah, 2012).In the same way, South Africa has taken promising and encouraging initiatives within the country to improve the retention of its health workers (Labonté et al., 2015). Some of the domestic policy statements include "increasing health worker production or the supply of health workers, improving student sponsorship programs, increased community engagement programs, developing health worker cadres (these are specifically made for South Africa and are less likely to be recognised by destination countries), Task-shifting, African Health Placements (AHP) Program and occupation-specific dispensation (OSD) which were designed to attract and retain South African Health Workers in the public health sector" (Labonté et al., 2015). This strategy proved to be effective since it had the power to minimise the wage gap between the salaries of nurses working in South African hospitals and those working abroad which largely slowed the outflow of professional nurses and at the same time promoted the return migration into the country (Labonté et al., 2015).

Another peculiar strategy widely employed by many countries in order to minimise the negative effect of brain drain is by engaging intellectual capital in the diaspora or return migration (Walton-Roberts et al., 2017;Afridi, Baloch, & Baloch, 2016; Petroff, 2016; Lu & Zhang, 2015; Tharenou & Seet, 2014; Osaretin & Eddy, 2012; Zweig, 2006; Shahana Kaukab, 2005; Teferra, 2005; Mutume, 2003). The diaspora approach or "Intellectual Diaspora", as stated by Teferra (2005), is one of the most effective approaches to reverse the brain drain in favour of the home countries either virtually or through physical engagement (Benedict & Ukpere, 2012; Gibson & McKenzie, 2012; Gibson & Mckenzie, 2010; Kana, 2010; Milio et al., 2012; Rappoport, 2004). The advent of globalisation and the unparalleled development of ICT have created opportunities for professionals to engage on a virtual basis through emails, the Internet, chat rooms, and video conferencing without moving from their countries of residence. This phenomenon is known as "Virtual Intellectual Diaspora Engagement", which means "the mobilisation of talent and skills across borders and time zones without physical mobility" (Teferra, 2005, p.232). It refers to the initiatives to mobilise the migrant or diaspora

communities to build their home countries from where they are without leaving their offices (Teferra, 2005). Such form of engagement is becoming a common platform for investing back into the home countries by those communities either by taking their own initiatives or through the strategic involvement of the respective states. For example, the Ethiopian North American Health Professionals Association (ENAPHA) has mobilised several US institutions and conducted a six-week training programme via video conferencing for groups of health professionals in the areas of HIV and AIDS, and malaria in association with the School of Pharmacy at AAU, Ethiopia (Teferra, 2005).

While the above strategy cannot fully compensate for the massive outflow of skills, it can nurture the potential to neutralise the effect of migration on the development of the country of origin to a certain degree (Teferra, 2005). Its effectiveness depends on the ability of both countries (home and host) to manage the mobility and circulation process as both countries are operating in different sociocultural, economic, political, technological and geographical settings (Teferra, 2005). The endeavour of the host countries to bring back the skills that already left the home countries involves multifaceted challenges and inhibiting factors. The political, social, academic, intergenerational, infrastructural, economic and cultural factors of both the countries of destination and the origin pose major challenges in an effort to effectively implement the brain circulation process (Teferra, 2005).

3.12.4. Institutional level initiatives

The home institutions need to develop sound human resource strategies to retain their top talents from leaving their institutions and their countries. One way of doing this is through devising policies and strategies that provide a conducive working atmosphere for the workers and ensure their quality of life for themselves and their families. The HR department's role is essential in establishing a conducive working environment for the professionals so that they will be able to contribute to the attainment of organisational goals. A study conducted at two selected South African universities suggests that universities should engage in continuous and regular surveys as well as conduct exit interviews and provide opportunities for development as possible strategies to reduce high employee turnover in the country (Masango & Mpofu, 2013). As part of retaining highly skilled human resources in the higher education sector, in particular, higher learning institutions should engage in the adjustment of their human resources policies such as promotion and the extension of retirement periods for senior faculty members (Dovlo, 2003).

Furthermore, improving non-financial incentives in the workplace is another plausible strategy to address the problem of brain drain. For instance, non-wage instruments such as the desire to obtain medical training abroad and acquire experience, and deterioration of working conditions, are regularly proffered as a possible explanation of their relevance to emigration and it might be more effective in altering migration flows (Moullan, 2014; Vujicic et al., 2004). "Life-long professional training

policies, career enhancement and professional advancement policies and improved working conditions" (Moullan, 2014, p.5) are among the non-financial measures that significantly influence the migrants' decision to remain in the country of origin.

In brief, the following strategies play a key role in reducing brain drain in SSA:

" Improvement in the standard of living of a country, increases in the quality of the workforce through better education, greater social stability of society in the form of higher levels of peace, and better property conditions that protect citizens from the arbitrary confiscation of their wealth" (Dipietro, 2014, p.36). Furthermore, "Policies favouring reduced brain drain through these means is also favourable to economic development. To develop, one needs to promote economic growth, enhance human capital through better education, and give human beings an incentive to accumulate wealth through assurances it will not be destroyed by war or readily taken away once it is amassed*"* (Dipietro, 2014, p.36).

3.13. CONCEPTUAL FRAMEWORK

Based on past studies or review of the literature, the following conceptual model illustrated in Figure 3.4 was developed to analyse the antecedents to brain drain in SSA with specific reference to the higher education.

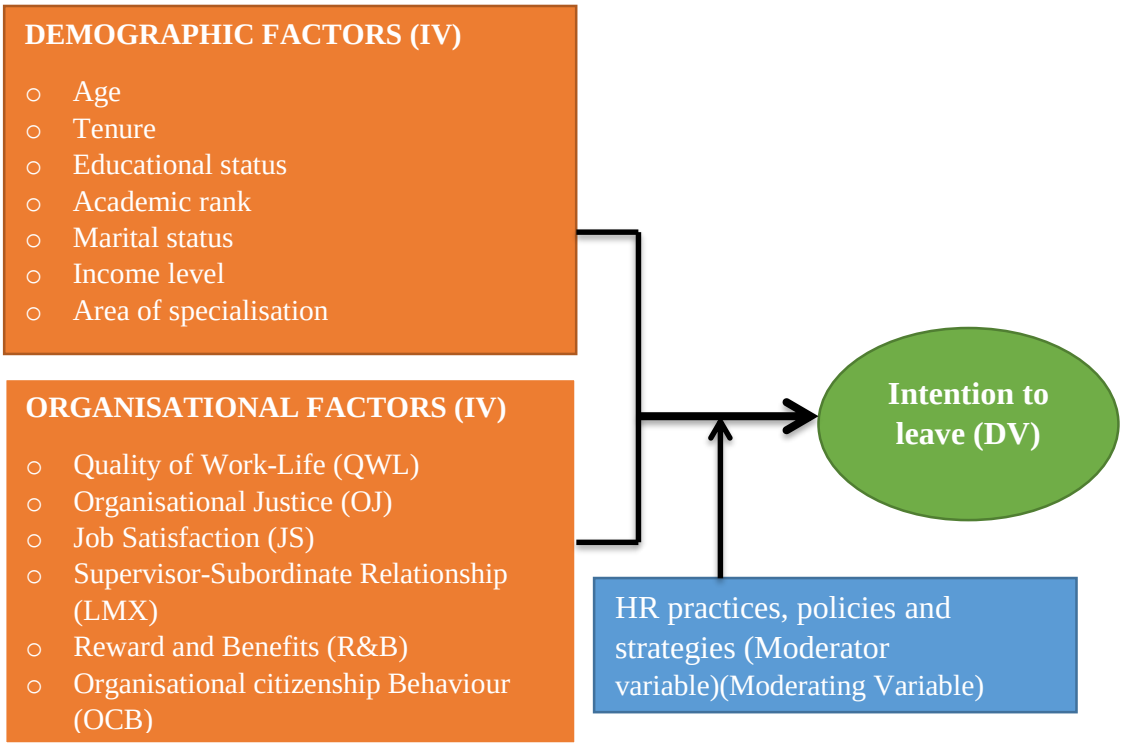


Figure 3.4: A conceptual framework on the antecedents to brain

3.14. SUMMARY

This chapter has summarised the essence of brain drain and its measures through a proxy construct known as ‘turnover intentions’. It covered the concept of brain drain, highlighted the theoretical perspectives on brain drain in its broadest sense, theoretical underpinnings explaining brain drain, ways of measuring and managing brain drain at institutional level, costs and consequences of brain drain, characteristics of brain drain, vulnerability of brain drain, theoretical foundations of antecedents of turnover intentions, impacts of brain drain, strategies for mitigating brain drain as adopted by various organisations and countries, and finally a conceptual framework for examining the various dependent variables (such as organisational and demographics) and the independent variable (turnover intentions). The following chapter (chapter four) highlights the methodology employed by the researcher to answer the research problems.

CHAPTER FOUR

RESEARCH METHODOLOGY

4.1. INTRODUCTION

Business or organisational research is a "systematic and organised effort to investigate a specific problem encountered in the work setting, which needs a solution through a series of steps that are designed and executed with the goal of finding answers through a series of steps that are designed and executed" (Uma Sekaran & Bougie, 2016). It is nothing but a systematic guiding principle that is aimed at collecting and interpreting data in order to answer a particular research problem (Saunders, Lewis, & Thornhill, 2016). The focus of this chapter is on the research approach underpinning the research and thus, the chapter explains the methodology employed to undertake the research ranging from specification of the research design, research philosophies, and research strategies to specific research methods used to collect data, administer the data collection process, the data analysis and reporting in a very concise and precise manner. The chapter concludes with the explanation of the psychometric characteristics (validity and reliability) of the research instruments, limitations of the study, ways of overcoming bias and strategies employed to ensure the ethical considerations employed. The research employed a mixed method approach and collected data via questionnaires and key informant interviews.

4.2. RESEARCH PHILOSOPHY AND PARADIGM

Research is embedded and deeply grounded in the researcher's beliefs about the world (Gupta & Awasthy, 2015). The worldviews of the researcher determine the kind approach pursued to pursue the study. These are guiding principles that govern the action of the researcher (Creswell, 2009). There are four basic categories of worldviews in research: "the post-positivism, social constructivist and the advocacy and participatory and the pragmatic" (Creswell, 2009). These major elements of each stance are discussed next and then are presented in Table 4.1 below.

4.2.1. Post-positivist worldview

A prior philosophy or epistemological position widely adopted by most of the researchers before the emergence of the post-positivism was the positivism paradigm which largely shares the assumptions made by post-positivism. Positivism resembles the post-positivist paradigm or philosophy in that "it encourages a concern for an objective form of knowledge that specifies the precise nature of laws, regularities, and relationships among phenomena measured in terms of social facts" (Gupta & Awasthy, 2015, p.6). This world view or paradigm view of the social world "encourages an epistemological stance that is based on studying the nature of relationships among the elements

constituting the structure" (Gupta & Awasthy, 2015, p.6). Historically, positivism has been advanced from the empiricist tradition of natural science which usually uses quantitative methods as research tools, as these are objective and the results are generalisable and replicable (Gupta & Awasthy, 2015). Researchers with a positivist epistemological stance mostly look for an explanation of behaviour, not for the meaning and hence they engage in a deductive approach to research. They use correlation and experimentation to reduce complex interactions with their constituent parts (Gupta & Awasthy, 2015).

However, post-positivism, as the name implies, shares most of the assumptions of the positivist paradigm. Like the positive paradigm, the assumptions under post-positivism "holds true more for quantitative research than qualitative research. It is sometimes called the scientific method or doing science research. It is also called positivist/Post-positivist research, empirical science, and post-positivism" (Creswell, 2009, p.6). The last term 'post-positivist' represents the philosophy after positivism, challenging the classical stance of the objecivity of truth (Creswell, 2009). Post-positivists hold a "deterministic philosophy in which causes probably determine effects or outcomes. This philosophy is reductionist in its approach in that it reduces the ideas into a small, discrete set of ideas to test, such as the variables that comprise hypotheses and research questions" (Creswell, 2009, p.7). In this respect, knowledge is generated through meticulous observation and measurement of the objective truth that exists in the world (Creswell, 2009, p.7). Researchers with a post-positivist stance "begins with a theory, collects data that either supports or refutes the theory, and then necessitates revisions before additional tests are made" (Creswell, 2009, p.7).

As stated in Creswell (2009, p.7), post-positivism involves the following five key assumptions: "(1) Knowledge is conjectural (and anti-foundational) - absolute truth can never be found arguing that evidence in research is always imperfect and fallible - it is due to this reason that researchers state that they do not prove a hypothesis; instead, they indicate a failure to reject the hypothesis; (2) Research is the process of making claims and then refining or abandoning some of them for other claims more strongly warranted – in this instance most quantitative research, for instance, starts with the test of a theory; (3) Data, evidence, and rational consideration shape knowledge. In practice, the researcher collects information on instruments based on measures of completed by the participants or by observations recorded by the researcher; (4) Research seeks to develop relevant, true statements, ones that can serve to explain the situation of concern or that describe the causal relationships of interests. In quantitative studies, researchers advance the relationships among variables and pose this in terms of questions or hypothesis (5) being objective is an essential aspect of competent inquiry; researchers must examine methods and conclusions for bias. For example, the standard of validity and reliability are important in quantitative research". The above assumptions work for the quantitative dimension of the current study which aimed to examine the various antecedents to academic staff intention to leave

at the three universities. It examined the extent of influence of the different variables or latent variables on the dependent variable (i.e. the intention to leave).

4.2.2. Social constructivist worldview

The "social constructivism worldview (often combined with interpretivism) is typically seen as an approach widely employed in qualitative research" (Creswell, 2009, p.8). Researchers with a social constructivist epistemological stance encourage a subjective form of knowledge based on an understanding of the manner in which people manifest their interaction with the world (Gupta & Awasthy, 2015). It is based on an assumption that people aspire to grasp the world in which they live and work through subjective judgement (Creswell, 2009). According to this paradigm, "the knowledge of the social world implies a need to understand the social reality embedded in the nature and the use of modes of symbolic action like language, labels, actions and routines" (Gupta & Awasthy, 2015, p.6). Researchers with a constructivist epistemological stance believe that most of the reality which is meaningful for human beings is largely constructed by them as an on-going process of interacting, experiencing and sharing (Gupta & Awasthy, 2015). According to this philosophy, it is hardly possible to make "an objective statement about the real world due to the fact that social reality and how it is imagined by human is a product of the human mind; humans are autonomous and are creative; and therefore research methods need to explore individual understandings and subjective experiences of the world" (Gupta & Awasthy, 2015, p.7). They are sceptical in assuming universality a priori and rather they recognise that the knowledge is built through the social construction of the world.

The constructivism paradigm strongly argues that "the world is socially constructed and so are the social phenomena", as opposed to the positivism worldviews which assume that "social reality can be explained by sheer observing the casual relationships of the physical world which are presumed to be stable" (Gupta & Awasthy, 2015, p.6). This notion of the positivism worldview is mostly refuted and challenged by those with constructivist worldviews in that the associations between variables do not exist independently of the interpretation of the researcher and argues that every observation concurrently affects what the researcher observes (Gupta & Awasthy, 2015). Unlike positivists, they look at understanding social behaviour rather than explaining it and focusing on its meaning and they usually employ qualitative research methods (Gupta & Awasthy, 2015). In brief, the objective of the investigation was to rely as much as possible on the participants' perspectives of the context being examined (Creswell, 2009). Usually broader and general questions are designed in this type of research to offer the participants the opportunity to develop their own meaning of the context through discussions or interactions with other persons (Creswell, 2009). In this case, "researchers recognise their own backgrounds shape their interpretation, and they position themselves in the research to acknowledge how their interpretation flows from their personal, cultural and historical experiences" (Creswell, 2009, p.8). The objective of the researcher is to explain the understandings participants have

about the particular phenomenon under study (Creswell, 2009). As opposed to the positivism/post-positivism paradigm which starts with theoretical underpinnings, the social constructivists' world view goes the opposite way to develop a theory or pattern of meaning (Creswell, 2009). In essence, this paradigm assumes that "meanings are constructed by human beings as they engage with the world they are interpreting…human to engage with their world and make sense of it based on their historical and social perspectives- we are all born into a world of meaning bestowed upon us by our culture… the basic generation of meaning is always social, arising in and out of the interaction with a human community" (Creswell, 2009, p.8-9). These assumptions prove that social constructivists "use open-ended questions to allow the participants to share their views, they seek to understand the context or setting of the participants through visiting this context and gathering information personally, interpret what they find, and the interpretation is largely shaped by the researcher's own experiences and background; and it also implies that qualitative researchers are largely inductive and they involve generating meaning from the data collected" (Creswell, 2009, p.9).

4.2.3. Advocacy and participatory world-view

Participatory worldviews came about during the 1980s and 1990s to overcome the shortcomings imposed by the post-positivism paradigms which in their views claimed that imposed laws and theories rarely address the issues of social justice among the marginalised and vulnerable sections of the society (Creswell, 2009). This paradigm relies on the early works of Marx and proponents of the participatory worldview feel that the constructivist stance lacks the depth to initiate actions to help vulnerable people (Creswell, 2009, p.9). The paradigm holds an assumption that investigations need to be intertwined with politics and a political agenda. The study should contain a reform agenda that may benefit the participant, the institution and the researcher's life (Creswell, 2009, p.9) Moreover, the research needs to address specific issues as well as pertinent social issues of the day, such as "empowerment, inequality, oppression, domination, suppression, and alienation" (Creswell, 2009, p.9). The investigator should also be careful of not marginalising others as a result of this research. The advocacy/participatory worldview allows the participants to vent their voices, advocating initiatives for change to improve their lives in such a way that it helps to initiate change and reform towards positive change (Creswell, 2009). This philosophy is peculiar in that it works on the sections of the society that may be vulnerable and marginalised making the participants themselves part of the knowledge generation process (Creswell, 2009).

4.2.4. Pragmatic worldview

The pragmatism worldview "arises out of actions, situations, and consequences rather than antecedent conditions" (Creswell, 2009). Researchers with a pragmatist epistemological stance use all the means necessary to get to the base of the problem instead of focusing on the specific methods to be employed

(Creswell, 2009). As a philosophical underpinning guiding a mixed method research or study in social science, it employs a pluralistic approach to generate knowledge about the problem (Creswell, 2009, p.10). Pragmatism "provides a philosophical basis for research in that there is no one system of philosophy and reality underpinning the study, individuals have a freedom of choice (researchers are free to choose the methods, techniques, and procedures of research that best meets their needs and purposes), the world is not seen as an absolute unity (making the researchers employ many approaches for collecting and analysing data rather than subscribing to only one way such as qualitative or quantitative), truth is what works at the time, allows researchers to look to the what and how to research, based on the intended consequences – where they want to go with it, agree that research always occurs in social, historical, political, and other contexts, etc." (Creswell, 2009, p.10-11). Thus, pragmatism "opens the door to multiple methods, different worldviews, and different assumptions, as well as different forms of data collection and analysis for a mixed method researcher" (Creswell, 2009, p.11). Adopting such a pragmatic worldview as a mixed method researcher is viable as it combines the strengths of both positivism and constructivism and provides the researcher the freedom to choose how and when to gather and analyse the data. Furthermore, it provides the ability to take advantage of the qualities of both philosophies in understanding a particular phenomenon.

Table 4.1: Four world-views

Post-positivism	**Constructivism**
Determination	Understanding
Reductionism	Multiple participant meanings
Empirical observation and measurement	Social and historical construction
Theory verification	Theory generation
Advocacy/Participatory	**Pragmatism**
Political	Consequences of actions
Empowerment issue-oriented	Problem-centred
Collaborative	Pluralistic
Change-oriented	Real-world practice oriented

Source: Adapted from Creswell (2009, p.6)

4.2.5. Research philosophy appropriate for this study

Pragmatism philosophy was selected for guiding the current study since it employs a mixed method research approach. It combines both the qualitative as well as quantitative approaches for answering the research questions. Pragmatism is the best option as "it opens the door for the mixed method researcher to multiple methods, different world-views, and different assumptions, as well as different forms of data collection and analysis" (Creswell, 2009, p.11). Therefore, adopting this philosophy was a viable option as it combines the strengths of different world-views and paradigms. In addition, it provides the researcher with the freedom to choose how to collect and analyse the research data.

4.3. OVERVIEW OF RESEARCH METHODOLOGY THEORY

The research process is a journey followed by the researcher in undertaking the research (Kumar, 2011). It begins with formulating the objective of the study and ends with reporting the findings. However, Saunders et al. (2016) comprehensively described what a research process should entail, as shown in Figure 4.1.

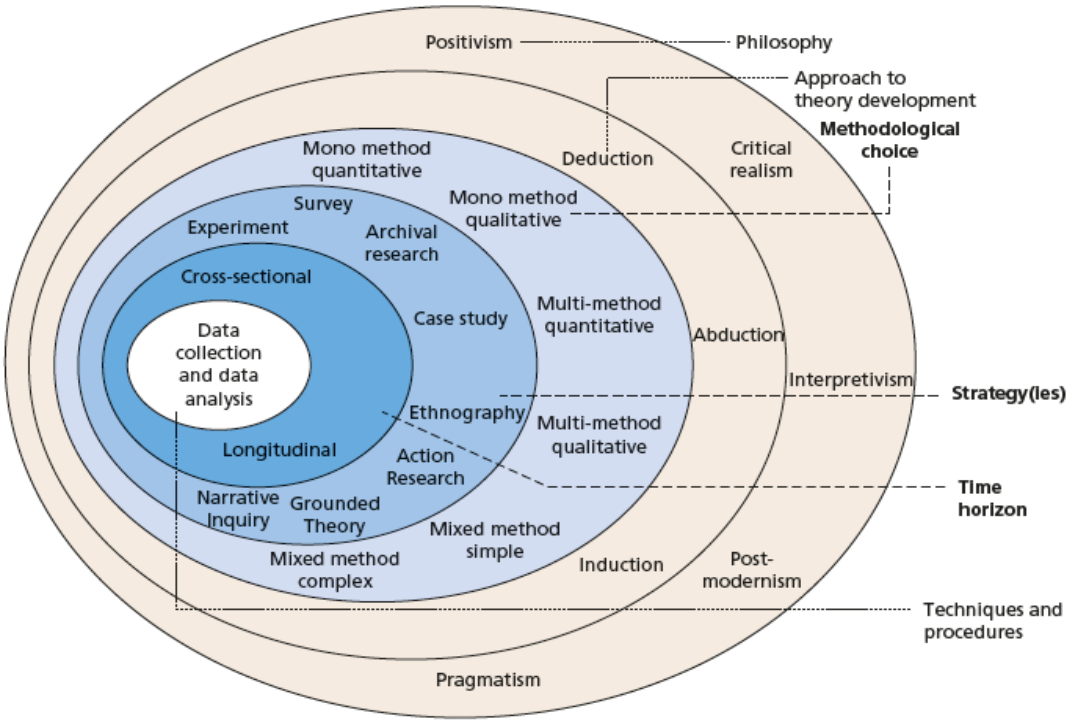


Figure 4.1: The research onion

Source: Adapted from (Saunders et al., 2016, p.164)

The 'research onion' ranges from defining the research philosophy to the data collection and analysis as shown in Figure 4.1 above. In this study, the researcher adopted a definition given by Saunders et al. (2016) due to its comprehensiveness and the next section is based on the concept of the research onion.

4.4. RESEARCH APPROACHES

Research approach involves activities ranging from wider assumptions to the acts of collecting, analysing and interpreting data (Creswell, 2009). Depending on the kind of problem being investigated, the research approach is categorised into two phases: data collection and data analysis. At this level, the classification based on reasoning was adopted for explaining the research approaches.

Accordingly, there are three different categories of research approaches – inductive, deductive and a combination of inductive and deductive approaches.

4.4.1. Inductive approach

Inductive reasoning or approach is "a theory-building process, starting with the observations of specific instances and seeking to establish generalisations about the phenomenon under investigation having the following purposes: (a) condense raw textual data into a brief, summary format; (b) establish clear links between the evaluation or research objectives and the summary findings derived from the raw data; and (c) develop a framework of the underlying structure of experiences or processes that are evident in the raw data" (Gupta & Awasthy, 2015, p.20). The approach uses the research question to narrow the scope of the study as opposed to the deductive approach which usually begins with a hypothesis. Though there is no hard and fast rule as there are some qualitative studies that have a deductive orientation, such an approach is generally associated with qualitative research. This particular study adopted an inductive approach as its choice with the aim of exploring the factors contributing to academic brain drain at the three case study universities. Figure 4.2 shows the pictorial representation of an inductive approach in research.

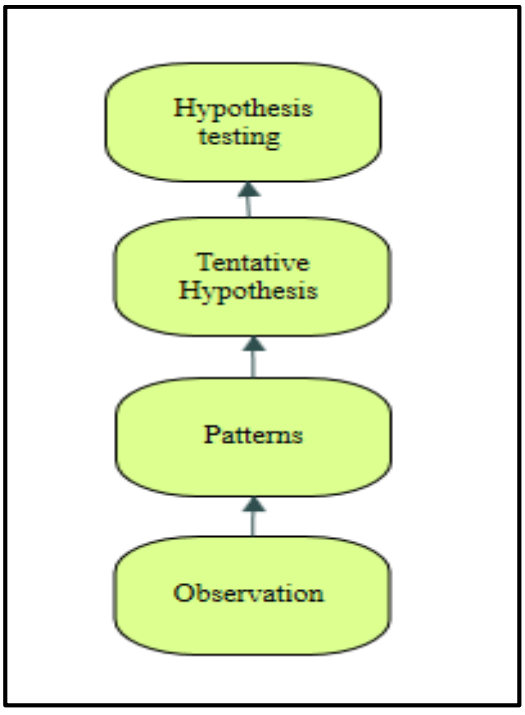


Figure 4.2: The inductive approach in research

4.4.2. Deductive approach

The deductive approach to research is aimed at either developing or testing theory or a hypothesis. As indicated in Figure 4.3, the deductive approach usually begins with a hypothesis and its emphasis is generally on causality or relationships between variables such as predictor and outcome variables. One of the key limitations of this approach is that it largely ignores humans' interpretation of their social world as it is happening. In the context of this study, a deductive approach was employed to examine the influence of various antecedents (demographic and organisational) on the propensity of academic staff who quit their jobs at selected universities in Ethiopia and South Africa. Figure 4.3 best describes the deductive approach in research.

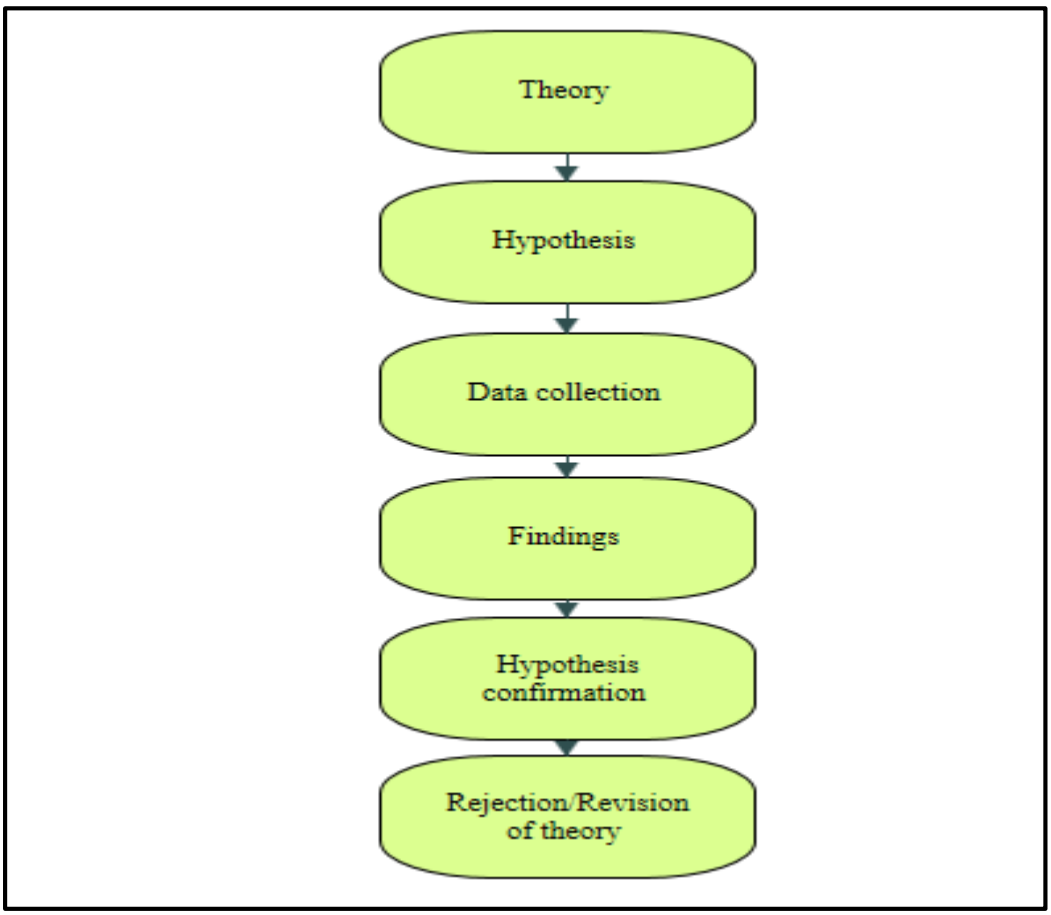


Figure 4.3: The deductive approach in research

4.4.3. Combination of deductive and inductive approach-mixed method

In their own ways, both deductive and inductive approach have their limitations and shortcomings. For instance, the deductive approach ignores the humans' interpretation of their social world as it is happening whereas one of the greatest weaknesses of the inductive approach is its subjectivity and the

lack of uncertainty. The third alternative approach to research is designed to overcome the shortcomings and weaknesses of the two approaches. Combining both approaches strengthens the research findings, enriches the data and finally helps to validate the research findings through triangulation. Figure 4.4 displays the combination of inductive and deductive approach.

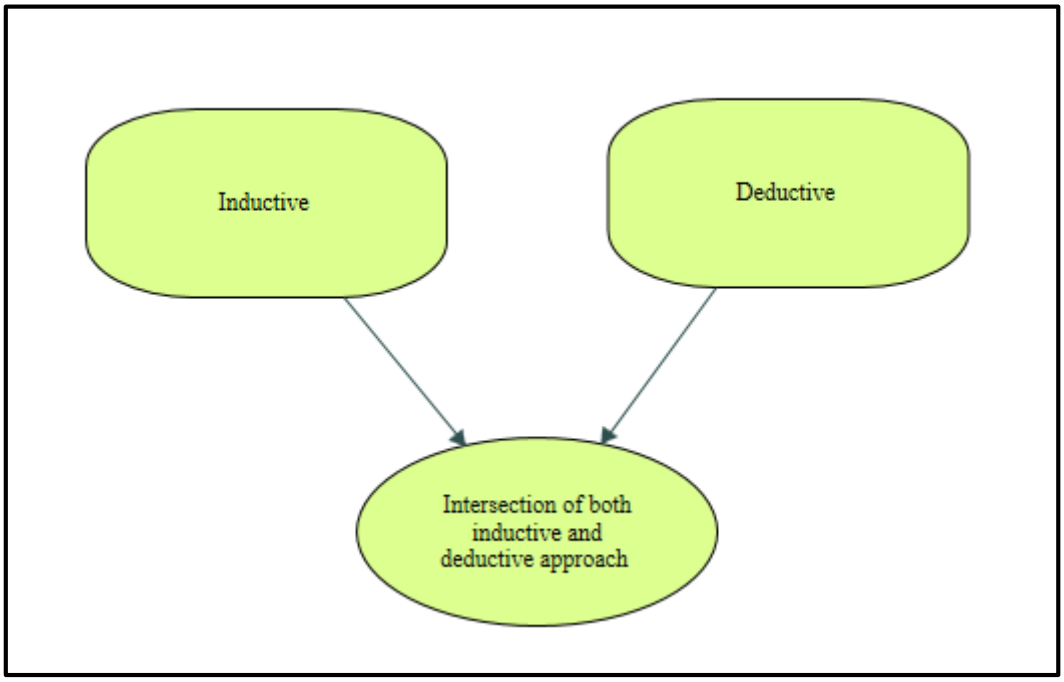


Figure 4.4: Combination of inductive and deductive approach or mixed method approach

4.4.4. The approach adopted for the study

A combination of the inductive and deductive approaches was adopted for this research. A questionnaire survey was employed to collect quantitative data aimed at examining the influence of some antecedents (demographic and organisational) on propensity of academic staff to quit their jobs at the case study universities whereas a key informant interview was adopted to collect qualitative data with the goal of exploring the various issues related to academic brain drain within the context of the social settings at the three universities. It is for these reasons that the researcher adopted the combination of the two approaches as it was best suited for the study.

4.5. RESEARCH PURPOSES AND STRATEGIES

Research purposes and strategies are intertwined and are hardly separated. Whereas research is classified into three categories based on purposes, there are different types of research strategies derived from the purposes of the study. In this section, the author of this thesis explains the purposes of research and the strategies adopted by many researchers in order to execute the research objectives.

4.5.1. Purposes of research

The purpose of a research study emanates from the conclusions that the researcher aims to draw from the study. On the basis of the goals that the researcher aims to attain through their study, there are three different types of studies such as "exploratory, descriptive and explanatory research" (Saunders et al., 2007, p.139). The next sub-section explains each of them separately.

4.5.1.1. Exploratory studies

Exploratory research is "a valuable means to ask open questions to discover what is happening and gain insights about a topic of interest" (Saunders et al., 2016, p.174). Exploratory research aims to examine an unknown problem through a more open, flexible, and inductive approach to unravel new insights into a research problem. According to Saunders et al. (2007, p.139), "an exploratory study is a valuable means of finding out 'what is happening; to seek new insights; to ask questions and to assess phenomena in a new light". Exploratory studies are usually conducted at the beginning of a research inquiry with the aim of exploring the existing information around the selected research problem. It employs secondary research, informal qualitative approaches and formal qualitative researches such as key informant interviews, focus group discussions and other approaches. The findings obtained through exploratory studies are not typically generalisable to the population at large. In brief, the primary purpose of such a study is to warrant clarity on the variables involved in the research process. Sometimes it resembles the grounded theory approach to qualitative research or interpretive research.

4.5.1.2. Descriptive strategies

In contrast to exploratory studies, descriptive studies aim to describe phenomena in more formalised studies and they typically involve a clearly defined hypothesis or research inquiry (Cooper & Schindler, 2014). In contrast to exploratory studies, descriptive studies are "more formalised studies are typically structured with clearly stated hypotheses or investigative questions. Formal studies serve a variety of research objectives: descriptions of phenomena or characteristics associated with a subject population (the who, what, when, where, and how of a topic), estimates of the proportions of a population that have these characteristics, and discovery of associations among different variables" (Cooper & Schindler, 2014, p.134). In a keeping with this, Saunders et al. (2007, p.140) argued that descriptive research is aimed "to portray an accurate profile of persons, events or situations". A descriptive study may be simple or complex depending on the type of research and the problem under investigation. Despite this, a descriptive study can be as demanding of research skills as the casual study, and it is necessary to insist on the same high standards for design and execution (Cooper & Schindler, 2014). In most instances, descriptive strategies are adopted along with either exploratory or explanatory research strategies.

4.5.1.3. Explanatory strategies/Causal studies

According to Saunders, Lewis, and Thornhill (2016, p.176), explanatory study aims to "establish causal relationships between variables may be termed as explanatory research". Explanatory studies are aimed at the identification of the causality and its main focus should be eliminating a plausible rival hypothesis.

In the absence of lack of consensus reached among social science scholars among the three purposes of the study, the purpose of this particular study was threefold: to explore, to describe the phenomenon as it stands, and lastly to explain the relationship between variables using inferential statistics.

4.5.2. Research strategies

A research strategy is defined as "a plan of how a researcher will go about answering her or his research question. It is the methodological link between your philosophy and subsequent choice of methods to collect and analyse data" (Saunders, Lewis, & Thornhill, 2016, p.177). It has different names such as "approaches to inquiry" or "research methodologies" (Creswell, 2009, p.11). Since there is no fixed best kind of strategy to purse, in most instances multiple strategies could be adopted for a particular study. According to Saunders et al. (2007, p.141), the possible research strategies include "experiment, survey, case study, action research, grounded theory, ethnography, and archival research". However, Creswell (2009, p.12) classified research strategies into three major categories based on the research method or approaches to data collection adopted by the researcher. Accordingly, "experimental, non-experimental and survey design" were classified under quantitative whereas "narrative research, phenomenology, ethnographies, grounded theory studies and case studies" were grouped under qualitative strategies and finally, "sequential, concurrent and transformative strategies" were classified under mixed method research. This part of the thesis explains the different types of research strategies based on the classifications partly adopted from Creswell (2009, p.12) and Saunders et al. (2007, p.139).

4.5.2.1. Experimental design

As per the words of Saunders et al. (2007, p.142), the term experiment refers to "a form of research that owes much to the natural sciences, although it features strongly in much social science research, particularly psychology". The main goal of this kind of study is to examine the cause and effect relationship between endogenous and exogenous variables. The level of complexity in experimental research varies from one study to another as some of the studies are devoted to studying the mere relationship between two variables whereas others go to the extent of examining the size of the influence. In more specific terms, the "experimental research seeks to determine if a specific treatment influences an outcome. This impact can be assessed by providing a specific treatment to one group

and withholding it from another and then determining how both groups scored on an outcome (in other words experimental and control groups)" (Creswell, 2009, p.12).

4.5.2.2. Survey research design

The survey research design or approach is "usually related with the deductive reasoning. It is a popular and common strategy in business and management research and is most frequently used to answer who, what, where, how much and how many questions" (Saunders et al., 2007, p.144). This strategy is widely employed for both exploratory as well as descriptive types of research or studies. This strategy is "highly economical as it allows the researcher to collect a large volume of data from a sizable population" (Saunders et al., 2007, p.144). The survey strategy "allows you to collect quantitative data which you can analyse quantitatively using descriptive and inferential statistics. It provides a quantitative or numeric description of trends, attitudes, or opinions of a population by studying a sample of that population. It includes cross-sectional and longitudinal studies using questionnaires or structured interviews for data collection, with the intent of generalising from a sample to population (i.e., inductive approach)" (Creswell, 2009, p.12). Survey research strategy is broadly classified into the 'cross-sectional' study and 'longitudinal study'. Cross-sectional research refers to a kind of study which takes a snapshot of a situation in time and this type of research does not attempt to comment on trends or on how situations develop over a time period. It only examines how something is done at the time of the research study and will generally seek to "identify and understand differences between the various members of the study population" (Remenyi, Williams, Money, & Swartz, 2010, p.47). However, "longitudinal research requires a period of time sufficiently long for changes to have occurred and to be observed" (Remenyi, Williams, Money, & Swartz, 2010, p.47).

4.5.2.3. Case study

The case study approach concentrates on one thing and it is an in-depth investigation into a particular issue within its real-life setting (Saunders et al.,2016). It is "a strategy of inquiry in which the researcher explores in depth a program, event, activity, process, or one or more individuals. Cases are bound by time and activity, and researchers collect detailed information using a variety of data collection procedures over a sustained period of time" (Creswell, 2009, p.13). The case study approach is widely employed in both explanatory as well as exploratory research. It may also employ diversified data collection methods including "interviews, observation, documentary analysis, and questionnaires". Consequently, "if you are using a case study strategy you are likely to need to use and triangulate multiple sources of data" (Saunders et al., 2007, p.146). The term triangulation refers to "the use of different data collection techniques within one study in order to ensure that the data are telling you what you think they are telling you" (Saunders et al., 2007, p.146).

4.5.2.4. Action research

Action research as a research strategy was originally coined by Lewin in 1946 (Saunders et al., 2007, p.147). The primary purpose of action research is " to promote organisational learning to produce practical outcomes through identifying issues, planning action, taking action and evaluating action" (Saunders, Lewis, & Thornhill, 2016, p.190). According to Stringer (2004, p.3) as cited in (Punch, 2005, p.160), the term action research refers to "a careful, diligent inquiry, not for purposes of discovering new facts or revising accepted laws or theories, but to acquire information having practical application to the solution of specific problems related to their work". It brings together the acting (or the doing) and the researching (or the inquiry). The inquiry is deliberately designed to address practical research problems and come up with practical and implementable solutions to solve the problems. It is "an emergent and iterative process of inquiry that is designed to develop solutions to real organisational problems through a participative and collaborative approach, which uses different forms of knowledge, and which will have implications for participants and the organisation beyond the research project" (Saunders et al., 2016, p.189). Although it is mostly categorised under qualitative research design, action research does not rely only on qualitative data; rather it may involve quantitative, qualitative or mixed method research (Punch, 2005, p.161).

In brief, "Action research differs from other research strategies because of its explicit focus on action related to multiple stages, to explore and evaluate solutions to organisational issues and to promote change within the organisation" (Saunders, Lewis, & Thornhill, 2016, p.191). (Punch, 2005).

The next figure shows the action research spiral.

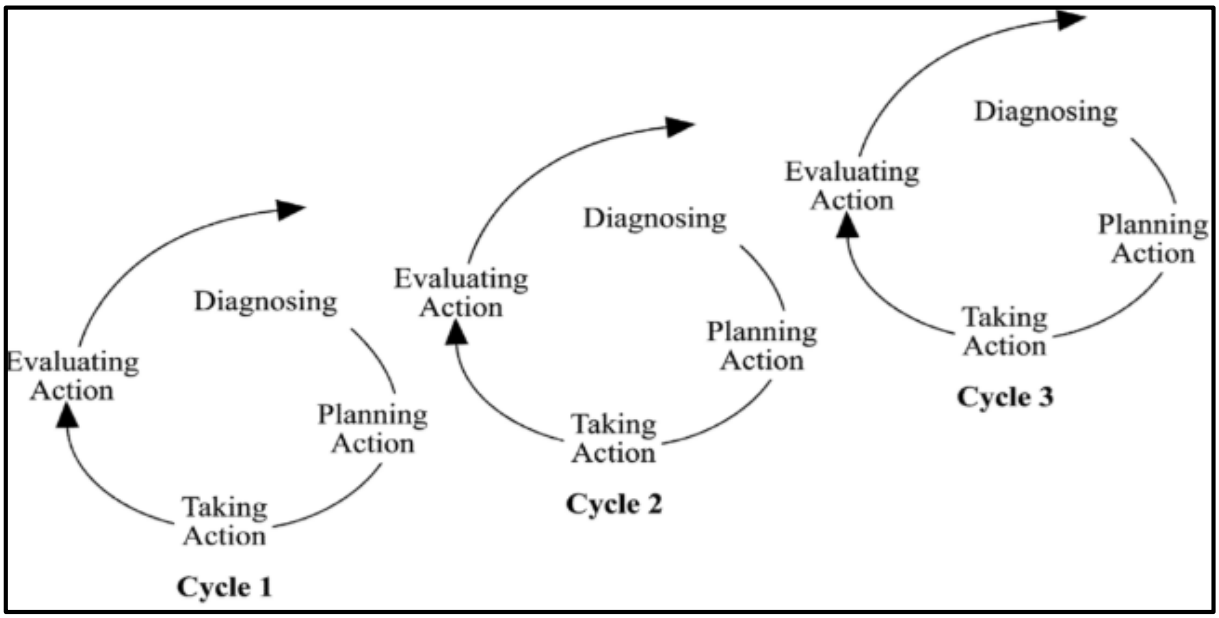


Figure 4.5: The action research spiral

Source: Adapted from Saunders, Lewis, & Thornhill (2016, p.191)

4.5.2.5. Grounded theory

Grounded theory is "a strategy of inquiry in which the researcher derives a general, abstract theory of a process, action, or interaction grounded in the views of participants. This process involves unique using multiple stages of data collection and the refinement and interrelationship of categories of information" (Creswell, 2009, p.13). The two key characteristics of this strategy are: "the constant comparison of data with emerging categories and theoretical sampling of different groups to maximize the similarities and the differences of information" (Creswell, 2009, p.13). Some strongly argue against the notion of grounded theory as a 'theory' and reckon that it is a 'method, an approach and a strategy' (Punch, 2005, p.155). The author defined grounded theory as a "research strategy whose purpose is to generate a theory from data" (Punch, 2005, p.155). The main objective of data is to generate a theory and it is developed inductively from the data (Punch, 2005). Thus, it is an overall strategy or approach for doing research in qualitative studies. Grounded theory has a particular set of techniques and procedures: grounded theory strategy and grounded theory analysis in which case the approach is given due emphasis at this level (Punch, 2005, p.155). In brief, grounded theory is a strategy to qualitative studies or interpretative research that attempts to unearth a theory from the data itself rather than from a predisposed hypothesis.

4.5.2.6. Ethnographic study

Ethnography is "a strategy of inquiry in which the researcher studies an intact cultural group in a natural setting over a prolonged period of time by collecting, primarily, observational and interview data" (Creswell, 2009, p.13). It is borrowed from social anthropologists and it is essentially phenomenological research in nature (Remenyi et al., 2010, p.51). Though it is impossible to exclude the application of ethnographic research in the fields of management studies; it is not used extensively in the fields of business and management (Remenyi et al., 2010, p.51). Ethnography as a qualitative research strategy is the most flexible and ever-evolving "in response to the lived realities encountered in the field setting" (Creswell, 2009, p.13).

4.5.2.7. Archival/desktop research

The advent of ICT and the subsequent digitalisation of data have made it possible for researchers to have access to sources around the world, including "university-based, governmental, organisational and media documents and other data" (Saunders, Lewis, & Thornhill, 2016, p.183). The term archival in this context refers to recent as well as historical documents. What makes this strategy different is that the data are collected under the natural process of day-to-day activities and it is not meant to be compiled for the purpose of secondary research. Among the limitations of the desktop research is

availability, access, censorship due to confidentiality, missing data and hence it requires the researcher to ensure the availability of data before designing the research (Saunders et al., 2007).

4.5.2.8. Phenomenological research

Phenomenological research is "a strategy of inquiry in which the researcher identifies the essence of human experiences about a phenomenon as described by participants. Understanding the lived experiences marks phenomenology as a philosophy as well as a method, and the procedure involves studying a small number of subjects through extensive and prolonged engagement to develop patterns and relationships of meaning" (Creswell, 2009, p.13).

4.5.2.9. Factors influencing the choice of research strategy

The selection of a particular research strategy, among others, is largely influenced by four major factors (in addition to the worldviews, strategy and methods) including cost of the research, time needed to undertake the study, skill of the researcher and the nature of the research question or problem under consideration (Creswell, 2009; Remenyi et al., 2010, p.45). The four factors influencing the choice of a particular research strategy are portrayed in the following table.

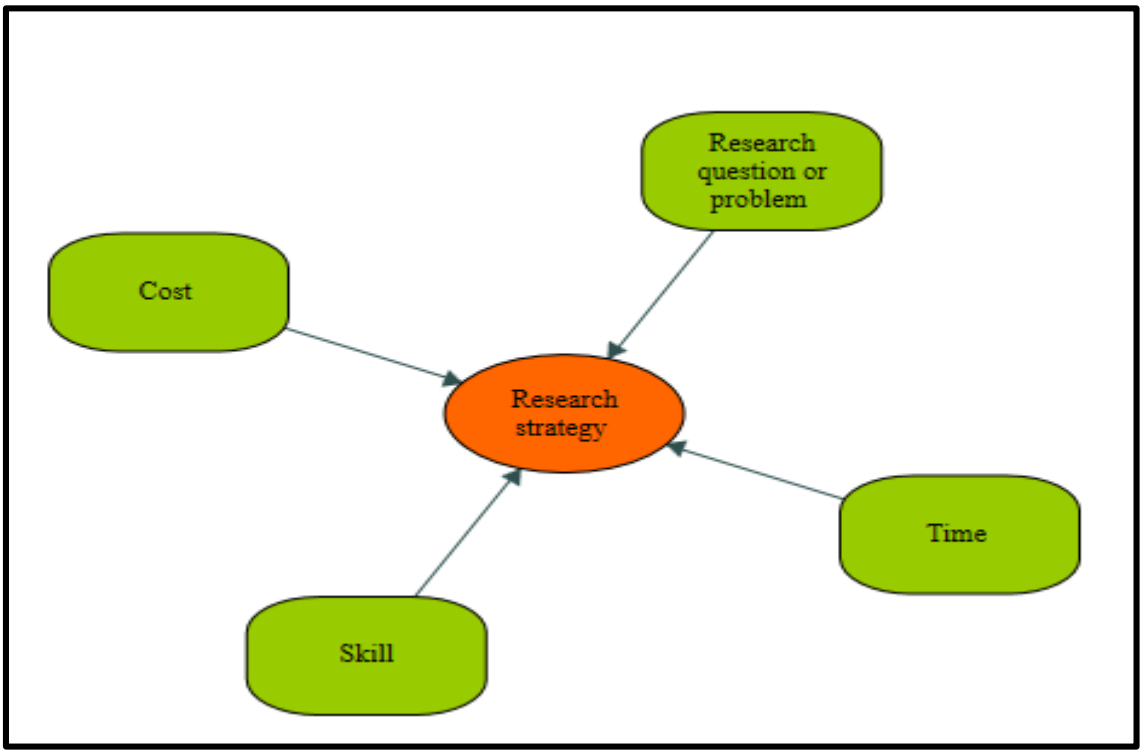


Figure 4.6: The four issues affecting the research strategy

Source: Adapted from Remenyi et al. (2010, p.45)

4.5.2.10. Research strategy adopted for this study

This study employed both an exploratory and a descriptive survey strategy. The exploratory research was aimed at investigating the factors contributing to an academic brain drain in the selected universities whereas the descriptive research was aimed at describing the phenomena through the collection of quantitative data from academic staff members at the three universities.

4.6. METHODOLOGICAL CHOICES

Researchers usually face a trade-off between the use of "a single data collection technique and corresponding analysis procedure (mono-method) and use of more than one data collection technique and analysis procedures to answer the research questions (multiple methods)" (Saunders et al., 2016; Saunders et al., 2007, p.151). As depicted in the diagram in Figure 4.7 below, methodological or research choices are broadly classified into 'Mono method' and 'Multiple methods'. As shown in the diagram, multiple-methods are further broken down into multi-method and mixed methods. The multi-method involves both quantitative and qualitative studies whereas the mixed methods involve mixed method research and mixed model research.

4.6.1. Mono method

Mono method research refers to a condition in which the researcher employs only one type of data collection technique and corresponding analysis procedures (Saunders et al., 2007, p.151). In the case of the quantitative method, the data is usually numeric and the data analysis approach followed largely involves the use of statistical tools and techniques. However, in the case of the qualitative method, the information is largely non-numeric and the data collection technique adopted is usually held through the interview and related approaches (Saunders et al., 2007, p.151). If the researcher chooses a mono-method, they should combine "a single quantitative data collection technique, such as questionnaire, with quantitative data analysis procedures; or a single qualitative data collection technique, such as in-depth interviews, with qualitative data analysis procedures" (Saunders et al., 2007, p.151-152).

4.6.2. Multiple methods

Multiple method research, however, is a situation where the researcher employs "more than one data collection technique and analysis procedures to answer your research question" (Saunders et al., 2007; p.152). This approach is widely practised among business and management schools in which case a single study may employ "a combination of qualitative and quantitative techniques and procedures as well as primary and secondary data. As opposed to the mono method, if one chose to combine data collection techniques and procedures using some form of multiple methods design, there are four different possibilities" (Saunders et al., 2007, p.152).

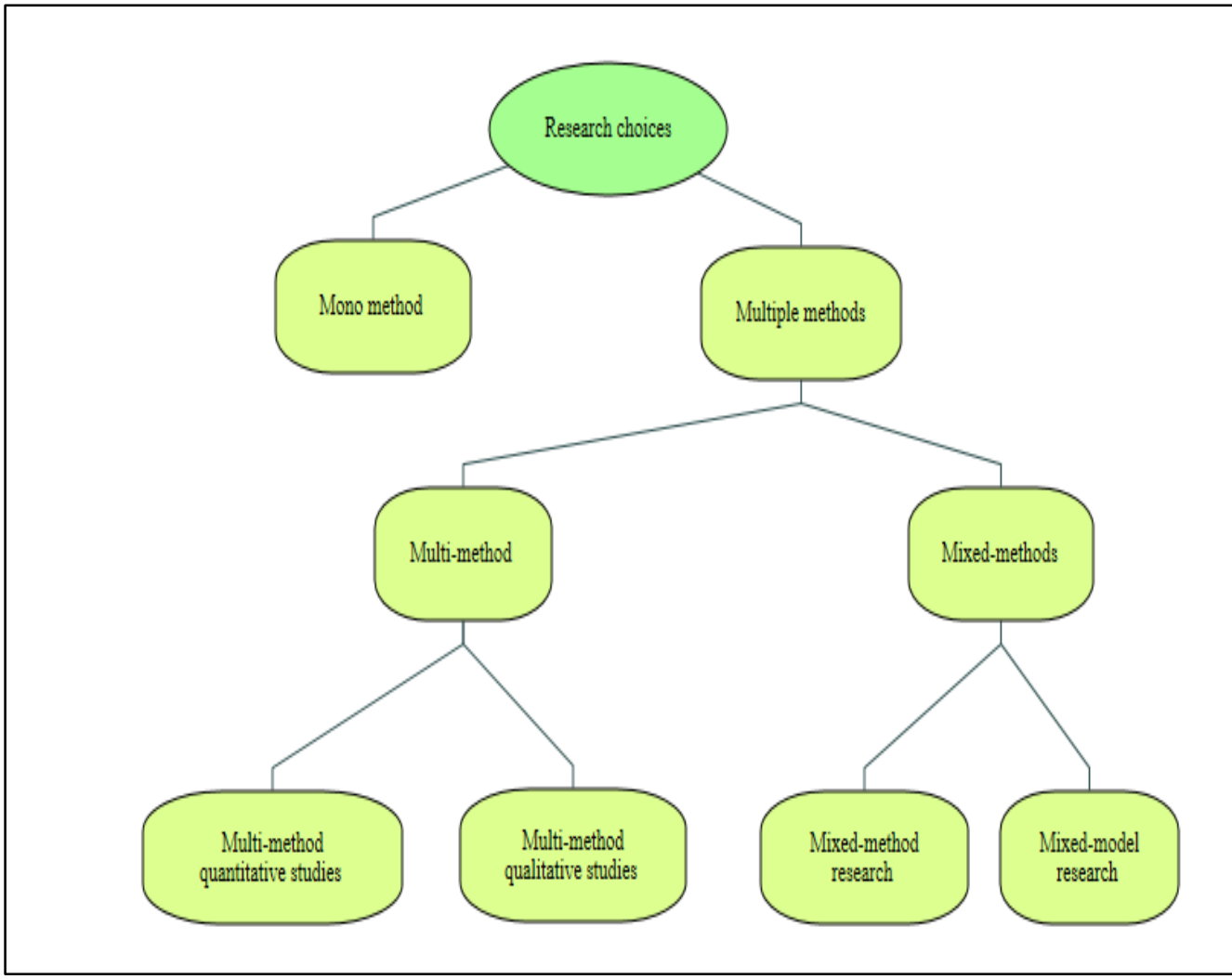


Figure 4.7: Research choices

Source: Adapted from Saunders et al. (2007, p.152)

4.6.2.1. Multi-method

Multi-method is the branch of multiple methods research that uses more than one quantitative or qualitative method but does not mix the two (Saunders et al., 2016). It adopts multiple methods of data gathering with related analysis tools but is limited within either a quantitative or qualitative worldview (Saunders et al., 2016; Saunders et al., 2007). There are two different types of multi-method: a multi-method quantitative study and a multi-method qualitative study. The multi-method quantitative study is "a situation in which the researcher chooses to collect quantitative data using statistical (quantitative) procedures whereas multi-method qualitative is a condition where the researcher might choose to collect qualitative data using, for instance, in-depth interviews and diary accounts and analyse these data using non-numerical (qualitative) procedures" (Saunders et al., 2007, p.152). Such a method is usually and mostly needed to triangulate data to give more evidence and validate the findings to add

rigour to the research towards answering the research objectives and to form a complete whole. In summary, the multi-method does refrain from mixing quantitative and qualitative approaches.

4.6.2.2. Mixed methods

Past studies have shown that mixed methods have become more popular and increasingly accepted in various fields of studies including business management and social sciences (Bryman & Bell, 2011). The mixed methods approach is "the branch of multiple methods research that combines the use of quantitative and qualitative data collection techniques and analytical procedures" to answer the research questions. It includes the "mixing of qualitative and quantitative data, methods, methodologies, and or paradigms in a research study or set of related studies" (Saunders et al., 2016, p.169). Early researchers such as Greene et al. (1989) identified five purposes of mixed method studies: "triangulation, complementarity, initiation, development and, expansion" (Tashakkori & Teddlie, 1998, p.43). In a similar vein, other authors argued that using mixed method designs were helpful for triangulation, generality, and completeness, and that they provide a sense of process, aid interpretation and explanation, complementarity, generality, studying different aspects and solving puzzles (Bryman & Bell, 2011; Saunders et al., 2007; Bryman, 2006). More importantly, adopting a mixed method helps to offset shortcomings of a particular research approach by the strength of another approach (Bryman, 2006). However, the effectiveness of mixed method research depends on whether the method is competently designed and conducted, appropriate to the research questions or research area with which the researcher is concerned, availability of resources for conducting the research and the competency or capacity of the researcher to carry out both methods (quantitative and qualitative). Broadly speaking, there are two types of mixed method research approaches: sequential and concurrent (see Table 4.2 below).

Table 4.2: Major mixed method design types

Design type	Timing	Mix	Weighing/Notation
Triangulation	Concurrent: quantitative and qualitative at the same time	Merge the data during interpretation and analysis	QUAN +QUAL
Embedded	Concurrent and sequential	Embed one type of data within a larger design using the other type of data	QUAN (qual) or QUAL (Quan)
Explanatory	Sequential: Quantitative followed by qualitative	Connect the data between the two phases	QUAN → qual
Exploratory	Sequential: Qualitative followed by quantitative	Connect the data between the two phases	QUAL → quan

Source: Adapted from Cameron, (2009, p.145)

4.6.2.2(a) Sequential

Sequential mixed method approaches or procedures are "those in which the researcher seeks to elaborate on or expand on the findings of one method with another method. This may involve beginning with a qualitative view for exploratory purposes and following up with a quantitative, survey method with a large sample so that the researcher can generalise results to a population. It may also begin with a quantitative method in which a theory or concept is tested, followed by a qualitative method involving detailed exploration with a few cases or individuals" (Creswell, 2009, p.14).

4.6.2.2(b) Concurrent

A concurrent mixed method approach or procedure "combines or merges both qualitative and quantitative data in order to provide a comprehensive analysis of the research problem" (Creswell, 2009, p.14). Furthermore, "the researcher collects both forms of data (qualitative and quantitative) and then integrates the information in the interpretation of the overall results" (Creswell, 2009, pp.14-15). In this type of design, the researcher may have "embedded one smaller form of data within another larger data collection in order to analyse different types of questions (the qualitative addresses the process while the quantitative, the outcome)" (Creswell, 2009) (see Figure 4.8 below for details).

4.6.2.2(c) Transformative

Transformative mixed methods procedures are "those in which the researcher uses a theoretical lens as an overarching perspective within a design that contains both quantitative and qualitative data. This lens provides a framework for topics of interest, methods for collecting data, and outcomes or changes anticipated by the study. Within this lens could be a data collection method that involves a sequential or a concurrent approach" (Creswell, 2009, p.15).

4.6.3. The research methodology adopted for this study

The study employed both a quantitative and qualitative approach in order to address the research problem. Using a single strategy such as a survey is a disadvantage as it lacks the rigour to unravel data that cannot be detected using the quantitative data collection approach. For instance, the survey strategy aimed at the gathering of quantitative data has not always been good at tapping the subjective dimension of behaviours (de Vaus, 2001, p.11). This study, therefore, adopted multiple approaches for data collection, that is, a combination of both quantitative and qualitative approaches (i.e. the mixed method approach). Moreover, following a mixed method approach provides the investigator the edge to capitalise on the strengths of the two methods and minimise the cost of using a separate and individual research approach (Bryman & Bell, 2011; Bryman, 2006). Therefore, the mixed method

research provides a good understanding of the nature, characteristics, and depth of the research problem as opposed to a single standing method such as either qualitative or quantitative.

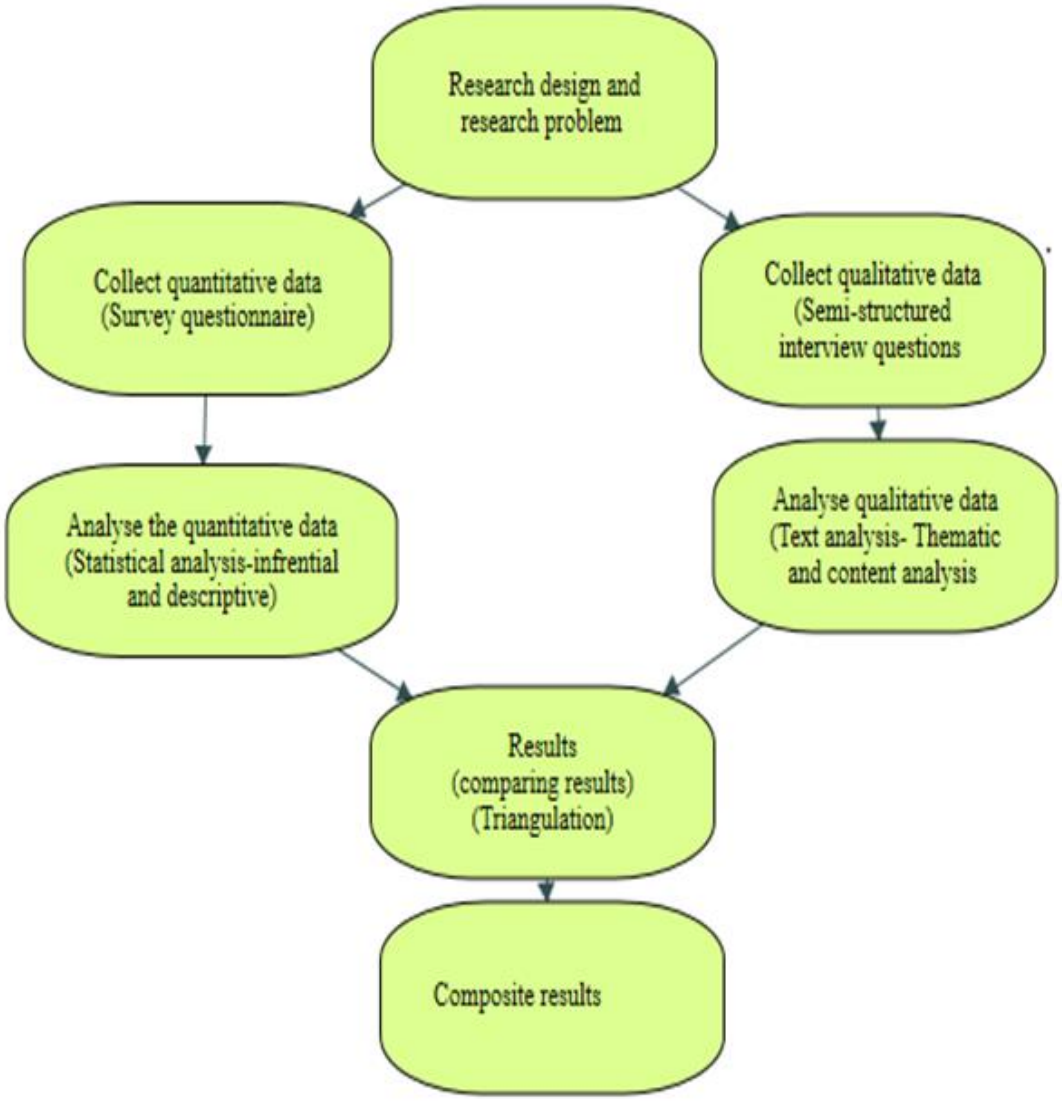


Figure 4.8: Concurrent design (mixed method research design)

Source: Adapted from Creswell (2009, p.210)

4.7. TIME HORIZONS

This part of the research deals with making a decision with respect to whether the study is a kind of a 'snapshot' or a 'series of snapshots'. In this case, "the snapshot horizon is what we call cross-sectional while a series of snapshots perspective is called longitudinal" (Saunders et al., 2007, p.155). At this level, it is essential to know that these time horizons are independent of which strategy the researcher is adopting or their choice of method.

4.7.1. Cross-sectional studies

Cross-sectional studies "involve the study of a particular phenomenon (or phenomena) at a particular time" (Saunders, Lewis, & Thornhill, 2016, p.200). Most of the researches conducted for academics adopt this line because they are constrained both financially and in terms of time. This often necessitates a survey strategy. They may also use qualitative "studies in which the studies are based on interviews conducted over a short period of time" (Saunders et al., 2016; Saunders et al., 2007).

4.7.2. Longitudinal studies

Longitudinal studies, on the other hand, extend the duration of the study beyond a single time. One of the key strengths of "longitudinal research is the capacity that it has to study change and development" (Saunders, Lewis, & Thornhill, 2016, p.200) whereas its major limitation is that it is time-consuming and does not suit most academic researches which are largely constrained by specific deadlines. It tries to measure if there is any change in the variables over a period of time (Saunders et al., 2016; Saunders et al., 2007).

4.7.3. The time horizon adopted for the study

The current study adopted a cross-sectional studies time horizon due to a number of factors ranging from the lack of sufficient time and resources to travel between the two countries. In addition, the study was highly constrained in terms of time. Thus, a cross-sectional study was adopted for this study. The study covers data collected between the last weeks of December 2016 to May 30, 2017, for both kinds of data collection techniques.

4.8. RESEARCH SETTING

The research setting in its broadest sense refers to the overall context in which the researcher conducts the study. This study was a comparative study which took into account the social, economic, technological and regulatory and political context of two countries, Ethiopia and South Africa. Ethiopia is located in the Horn of Africa whereas South Africa is located on the Southern tip of Africa. More specifically, the study was conducted using three case study universities from sub-Saharan Africa namely AAU, HU, and UKZN.

In terms of country of origin and specific location, two of the universities (AAU and HU) were from Ethiopia with AAU located in Addis Ababa and HU located in a relatively rural area about 526 km to the east of the capital. UKZN is located in Durban in the KwaZulu-Natal province, South Africa which is on the Southern tip of Africa.

In terms of campuses, AAU has eight campuses such as main campus, 4-killo, 5-killo, College of Commerce campus, Technology South campus, College of Health Sciences campus, College of Commerce Campus, College of Business and Economics Campus, and College of Agriculture and Veterinary medicine campus at Bishoftu. HU also has two separate campuses: main campus located about 5km away from Haramaya Town and the College of Health and Medical Sciences campus located in the old city of Harar. However, there are two satellite campuses within the outskirts of the main campus: Station campus and Ganda Je campuses where the college of veterinary sciences and Institute of Technology are located respectively. In the case of UKZN, the university has five campuses namely Edgewood, Medical School, Westville, Howard, and Pietermaritzburg. For this particular study, seven out of eight campuses, both the major campuses, and the three out of five campuses were covered for AAU, HU, and UKZN respectively based on convenience and accessibility.

4.9. SAMPLING PROCEDURES AND TECHNIQUES

Sampling techniques refer to the mechanisms by means of which the samples are chosen from the study population. According to Saunders et al. (2007, p.214), sampling procedures and strategies refer "to the roadmap followed by the researcher to select the sample respondents out of the population of the possible respondents". Sampling is one of the key ways in which survey researchers attempt to control the various factors that might influence their research. According to Yates, (2004, p.25), sampling has two major purposes. First, it is very unlikely or practically impossible that you could question or observe all the possible cases which relate to your research question. Second, and given the first condition, sampling is used to make sure that the results you gain are representative of the set of cases you have chosen to study. Therefore, this sub-section explains theories related to the sampling technique and characterises the samples selected for the study. It starts with the explanation of the population of the study, description of the sample respondents, determination of the sample size, the description of the possible sampling procedures and strategies, and finally the actual sampling procedures and strategies adopted for selecting the actual respondents for this particular study.

4.9.1. Total possible research population, target population, and response population

The term population refers to "the full set of cases from which a sample is taken" (Saunders et al., 2007,.212). For this study, it therefore involved approaching the total number of academic staff working at the three universities (AAU, HU, and UKZN) for the survey questionnaire. Accordingly, the population of the academic employees of the respective institutions at the time of the data collection was 5,417. At the institution level, for example, out of the total possible research population, 2820, 1147 and 1450 of them were from AAU, HU, and UKZN respectively (see Table 4.3). Furthermore, the target population refers to the total number of samples planned to be contacted from the list of academic staff members from the three institutions whereas the response population refers to those

who have completed the questionnaire or responded to the interview questions and whose responses are analysed in the report (See both Tables 4.3 and 4.4).

Table 4.3: Summaries of the total research target population and response populations

Institution	Proportion of respondents			Total planned sample size	Actual sample respondents	Difference[5]
	The population of academic staff[6]	Actual sample proportion	Contingency			
AAU	2820	0.52 (188)	0.20 (38)	226	263	+37
HU	1147	0.21 (76)	0.20 (15)	91	91	+117
UKZN	1450	0.27(97)	0.20 (19)	116	116	+9
Total	5417	1.00 (361)	0.20 (72)	433	596	+163

Source: Researcher's own compilation

Table 4.4: Institutional distribution of the key informants

Institution	Planned number of Key Informants	Number of actual key informants	Difference	Designations of the key informants (summary)
AAU	13	10	-3	Vice presidents, directors, deans, heads of departments and senior academics
HU	13	13	0	Vice presidents, directors, deans, heads of departments and senior academics
UKZN	13	6	-7	Deputy vice-chancellors, directors, deans, academic leaders
Total	39	29	-10	

Source: Researcher's own compilation

4.9.2. Description of the sampling frame

The sampling frame for any probability sample is "a complete list of all the cases in the population from which your sample will be drawn" (Saunders et al., 2007, p.214). It is "the responsibility of the researcher to make sure that the sampling frame is as up-to-date, complete, accurate, precise and controllable as possible" (Saunders et al., 2007, p.214). In this study, the sample frame comprised the list of all academic staff members working at the three universities (AAU, HU, and UKZN). The sample was selected because it was evident that it would be practically impossible to conduct a study on an entire population due to various reasons such as time, cost and other logistics and human resources-related issues (Sekaran & Bougie, 2009, p.264). In some cases, it is advantageous to conduct a study based on a sample instead of the population as it may help to produce a more reliable result (Sekaran & Bougie, 2009). Accordingly, a total of 433 academic staff members who were proportionally divided across the three institutions, based on the total number of academic staff in the

[5] The positive difference between the actual number of respondents and the planned sample size was due to the distribution of extra number of questionnaire in order to enhance the response rate. Such number of questionnaire was returned due to the involvement of the researcher both physically and virtually through all the means possible to follow-up the dissemination and collection of the questionnaire.

[6] The population of academic staff were obtained from the respective Human Resources departments of the respective universities during the 2015/2016 academic year.

three respective universities, participated in the research covering all the campuses of the three universities: Addis Ababa University, Haramaya University and the University of KwaZulu-Natal. However, an extra questionnaire was distributed to academic staff members at the three universities in order to accelerate the data collection process and to enhance the number of responses which led to a total of 596 responses of which 263 were from AAU, 208 from HU and 125 from UKZN. A summary of the breakdown of the samples from the three universities is provided in the next section, determination of sample size, and listed in Table 4.4 above.

4.9.3. Determination of sample size

In order to generalise from a random sample and avoid sampling errors or biases in a quantitative study, a random sample needs to be of sufficient size. One of the key questions here is 'How large a sample is required for a researcher to be confident that the survey results are an accurate representation of the population of interest?'(Bryman & Bell, 2011, p.187; Gill and Johnson, 2010, p.128). There are two ways for determining the sample size: the computation approach (Yamane, 1967, p. 886) and the tabular approach (Sekaran & Bougie, 2013, p.268). For the purpose of this study, the researcher found it convenient to follow the tabular approach to determine the sample size as it leads to sample size similar to that of a computational approach. Accordingly, "the sample size for the questionnaire survey was determined using the tabulate approach with a confidence interval of 95%" (Sekaran & Bougie, 2013, p.268). The determined sample size was proportionally allocated to the respective universities based on the total population of academic staff identified through annual reports at the time of data collection. Accordingly, 21% of the participants were from UKZN, 44.1% from AAU and 34.9% from HU. However, the sample size for the qualitative study was determined based on convenience and data sufficiency. The sample size for the three universities along with contingencies is illustrated in Tables 4.3 and 4.4 above.

4.9.4. Description of possible sampling procedures and strategies

Three universities were purposively selected for the study. The universities operate in the same educational sphere with similar mandates but in different socio-economic, political and technological contexts. All the universities are structured in the form of campuses. Addis Ababa University (AAU) has various campuses including the main campus, Business, and Economics campus, Institute of Technology North Campus and Institute of Technology South Campus, College of Commerce campus, College of Health Sciences Campus and Science Campus; Haramaya University (HU) has also various campuses including main campus, satellite campuses (such as the Institute of Technology and College of Veterinary Medicine), and the Harar College of Health and Medical Sciences aimed at teaching various fields of specialisation and engaged in research particularly in the fields of Agriculture, Health and related fields. Similarly, the University of KwaZulu-Natal (UKZN) has five campuses, namely

Westville, Howard, Pietermaritzburg, Edgewood and Nelson Mandela Medical School campuses. Whereas two of the universities (AAU and UKZN) are located in metropolitan areas in their respective countries, HU is located in a relatively remote part of Ethiopia about 526 km to the east of Addis Ababa, the metropolitan city and the business hub of the country.

A probability sampling approach was employed to disseminate the questionnaire across the three universities. The sample respondents from the respective universities were selected based on proportionate stratified and random sampling from all the campuses of the three universities. This excluded the College of Veterinary Medicine of AAU which is located at the outskirts of the city at Bishoftu; the Edgewood campus was also excluded from the sample after a series of attempts had been made to have access to the respondents from that side. Thus, it can be said that the selection of the sample was largely representative of the popluation which could be generalised or extrapolated in terms of the population with confidence (Gill and Johnson, 2010, p.127). In addition, judgemental sampling was employed to identify the key informants at the three universities based on the prior assessment. Regarding the key informants, a total of 29 key informants were interviewed from the three universities out of which ten were from AAU, 13 from HU and six from UKZN. Of the ten AAU key informants interviewed two were vice presidents, two of them were deans, two of them were directors, and four of them were senior and experienced academic members who had served the universities for a minimum of 30 years. In the same manner, 13 key informants were obtained from HU of which four were working in vice president positions, the other four of the respondents were working in the dean's position, two of them were working in the director position and one of the key informants was a senior faculty member with deep research and administrative experience. On the contrary, a relatively low number of key informants (six) was obtained from UKZN primarily due to the lack of accessibility and lack of willingness of the key informants. Of the six key informants interviewed from UKZN, one of them was a deputy vice-chancellor; one was dean of a school whose department had been identified to be vulnerable to academic brain drain; one was an academic leader whose department is relatively vulnerable to academic brain drain, two of the respondents were from the HR department (one being an HR officer from the central HR department and the second person an HR manager of one of the colleges which is highly susceptible to academic brain drain) and finally, one staff member of UKZN who had already resigned from the discipline and been placed in one of the other South African universities at the time of interview.

4.10. DATA COLLECTION METHOD

Data collection methods refer to the sources, tools, and approaches that a researcher follows to answer the research questions (Cooper & Schindler, 2008). In deciding about the method of data collection to be used for the study, there are "two types of data: secondary and primary" (Kothari, 2004, p.95). Secondary data includes "both raw data and published summaries" (Saunders et al., 2007, p.256).

These are the kind of data "which have already been collected by someone else and which have already been passed through the statistical process" (Kothari, 2004, p.95). Some of these types of data include institutionally generated data including payroll details, copies of letters and minutes, accounts of sales of goods and services or reports on newspapers, statistical data generated by different governmental and non-governmental organisations, and data from trade organisations (Saunders et al., 2007, p.256). The second major source of data is a primary source. Primary data are "those which are collected afresh and for the first time, and thus happen to be original in character" (Kothari, 2004, p.95). According to Saunders et al. (2007, p.256), primary data refers to "data collected specifically for the research being undertaken".

For this particular study the researcher employed two major sources of primary data collection techniques: a questionnaire and key informant interviews through both face-to-face and virtual settings. Secondary information was collected through the examination of archives such as institutions' and sectors' reports, published and unpublished sources, legislation, policies, and procedures(Cooper & Schindler, 2008).

4.11.CONSTRUCTION OF RESEARCH INSTRUMENT

4.11.1. Questionnaire

The research instrument was developed based on a review of extant literature emerging from the topic of the research, research problem, objectives of the study and research questions. The questionnaire was used to collect relevant information pertaining to the demographic characteristics of the respondents, and antecedents of academic staff propensity to depart from the selected universities. The questionnaire consisted of two major parts.

Section A dealt with the background/characteristics of the research participants whereas the second part dealt with both the dependent (turnover intentions) and independent variables (demographic as well as organisational variables). There were 11 demographic variables: gender, age, university type, nationality, years of service, qualification, academic rank, employment situation/type, average income, marital status and areas of specialisation. Gender is a dichotomous variable classified as male and female; age was measured according five categories ranging from less than 30 years, 30-39 years, 40-49 years, 50-59 years and 60 + years; the university type involved three institutions, namely UKZN, AAU and HU; nationality was measured using three variables as Ethiopian, South African, and others; years of experience (or tenure) was measured using six categories including less than 1 year, 1 - <6 years, 6 - <10 years, 10 - <15 years, 15 - <20 years, and 20 years and above; academic qualification was measured using five categories ranging from bachelor's degree, masters, doctorate, post-doctoral degree, and others; academic rank was measured using six categories such as full professor, associate

professor, senior lecturer/assistant professor, lecturer, junior/developmental lecturer/assistant lecturer, and others; three categories were used to measure employment situation, namely temporary, permanent and difficult to define/specify. Moreover, variables such as average income were measured using six income categories measured using Ethiopian Birr (ETB) and South African Rand (R) ranging from Up to ETB 11, 130/ Up to R6745, ETB 11,131 22,260/R6746 - R13,490, ETB 22,261 -33,390/R13,491 - R20,230, ETB 33,391- ETB 44,520/ R20, 231 - R26, 980, ETB 44,521- 55, 650/ R26,981 - R33,730, and Above ETB 55,650/Above R 33,730; marital status was measured using four categories including single, married, widowed and divorced/separated; and area of specialisation was measured using five categories including Science, Technology, and Engineering (SET), Business and Economics, Health and Medical Sciences, Social Science and Humanities and others.

The dependent variables were the antecedents of academic staff's intention to leave, including QWL, OJ, JS, LMX, R&B, and OCB. Quality of work life was measured using 13 items, organisational justice was measured using 20 items, job satisfaction was measured using 13 items, leader-subordinate relationship (LMX) was measured with seven items, rewards and benefits (R&B) was measured with six items and organisational citizenship behaviour (OCB) was measured with 16 items. However, the dependent variable is the academic staff intention to leave or stay. In all the questions, five-point Likert scale questions were used ranging from Strongly Agree (1) to Strongly Disagree (5) for all the constructs.

4.11.2. Interview checklist

The second primary data collection tool or instrument (qualitative data in particular) was an interview checklist. The checklist was intended to measure key research questions such as the status and challenges of higher learning institutions in the two African nation states and the three universities – vulnerability or susceptibility to academic brain drain, its causes, consequences, measurement, management, and strategies for retaining talents in the three institutions. Hence, the checklist was developed to measure six major themes related to brain drain with additional sub-questions. The questions were open-ended.

4.12.DATA COLLECTION PROCEDURE

After the finalisation of the data collection instruments, the researcher personally visited all the selected universities under investigation for collecting the necessary data. The data collection process passed through two stages which were done concurrently. The data was collected via questionnaire as well as through face-to-face interviews.

4.12.1. Survey

A questionnaire was distributed to the target respondents from the respective universities to gather primary data, with the assistance of data collectors. Before collecting the data, the researcher obtained all the necessary permission from the institutional heads/deans of the institutes and colleges. Assistants were sought at the three universities with a clear explanation of the objective of the study. The list of academic staff members from each college was sought and the respondents were identified. The questionnaire was coded and distributed to the respective campus in each of the selected universities through campus-based assistance and the supervision of the researchers. The questionnaire was made anonymous and the objective of the research was clearly discussed in the questionnaire. The respondents were guaranteed that their responses would be kept private and used for academic exercises only. They were requested to give their frank, honest and sincere responses.

4.12.2. Key informant interview

A key informant interview is among the key methods for collecting qualitative information in the journey of research. Key informants were identified purposively vis-à-vis their past experience and exposure to the higher education management and leadership, research and community services. Prior to conducting the interview, the essence and purpose of the research were clarified. Necessary preparations were also made to record the interview sessions. Any uncertainty and doubts regarding the questions were clarified during the interview process.

In this respect, a semi-structured key informant interview was held with 29 key informants from the three universities (10 from AAU, 13 from HU and 6 from UKZN) to gather pertinent information in relation to the state and challenges of higher education in both countries, vulnerability of the institutions to academic brain drain, its possible causes and impacts, the way it is being measured and managed in the organisation and finally, possible strategies pursued by the institutions in their attempt to retain their qualified and experienced staff members.

4.12.3. Secondary data

Analysis of secondary documents was another method of data collection employed to investigate the matter. In order to clearly conceptualise the subject matter and to develop an appropriate instrument for data collection, the researcher engaged in intensive desk research and review of the available, recent and relevant literature. To this effect, literature that was thoroughly reviewed included books, journal articles, reports, newsletters, websites and internet sources. In addition, government documents, including legislation, subordinate legislation, regulations to Acts of Parliament, consolidated instructions, procedural manuals, delegated instructions, circular letters, minutes of meetings and *ad hoc* policy decisions among others were consulted. Moreover, institutional reports were closely

examined in relation to the state of human resources management, higher education challenges and governance in countries, policies and procedures, working manuals, other published and unpublished sources in relation to the problem under study.

4.13.ADMINISTRATION OF THE DATA COLLECTION PROCESS

Data collection took place through the extensive involvement of the researcher and the assistance of two data collectors at the two institutions in Ethiopia. The data was collected during the months of December to mid-February 2017 from the two universities in Ethiopia and from March to May 2017 from UKZN in South Africa. The interviews were held exclusively by the researcher without seeking the assistance of any other person.

In the attempt to collect the data, a drop and collect approach was pursued among all the participants at the different campuses of the universities with the assistance of the data collectors. The researcher made the very frequent trips and visited those who had collected the questionnaires. In order to overcome the nonresponse challenge, the researcher distributed ample questionnaires which proved to provide a good harvest as seen from the response rate which was much more than the anticipated lowest expected sample size. This was the fruit of the effort made by the researcher and his engagement in the data collection process with focus, energy, and commitment. The social and communicative skill of the researcher also helped him to reap many numbers of questionnaires from the universities, with some exception of UKZN. The latter proved to be challenging for the researcher which was either due to cultural differences or the lack of cooperation of the academic staff members in completing the questionnaire and their level of willingness to participate in the key informant interview.

4.14.RESPONSE RATE

4.14.1. Questionnaire

In the case of the questionnaire, more than the minimum expected number of responses was obtained. Originally, about 414 responses were sought to be collected with a 20% allowance for overcoming the error. However, the actual usable response was about 596 out of a total of 700 questionnaires distributed across the three universities. Hence, the response rate was 85%.

4.14.2. Interview

With respect to the key informants, originally about 39 key informants from the three universities were sought to be interviewed, with 13 respondents agreeing to participate. However, in practice, the researcher was able to collect data from 29 key informants across the three universities with 10, 13 and 6 out of 13 being from AAU, HU, and UKZN respectively. As can be seen from the data, the

highest number or percentage of responses was from HU followed by AAU and lastly UKZN. The researcher himself transcribed the data obtained through the key informant interviews.

4.15. PSYCHOMETRIC PROPERTIES OF INSTRUMENTS

The study employed two different kinds of measurement devices. Each of the instruments (questionnaire and interview checklist) was examined for goodness depending on the nature of the research instrument. For instance, a questionnaire was examined against reliability and validity and the research interview checklist was checked against 'trustworthiness' by checking the credibility, transferability, dependability, and confirmability of the checklist (Bryman & Bell, 2011; Shenton, 2004).

4.15.1. Reliability

Reliability denotes "the extent to which the data collection techniques or analysis procedures will yield consistent findings" (Saunders et al., 2007, p.149). Kothari (2004) described the test of reliability as one of the tests of the soundness of a measurement instrument. Accordingly, a measurement is reliable if it provides consistent results. For this particular study, the researcher adopted a mixed research approach with multiple information sources in order to minimise the respondent bias (Guest, 2001; Katou, 2008). Triangulation helps to ensure the reliability of data collected from the respondents. With respect to qualitative data, the researcher designed a standardised interview checklist and conducted the key informant interviews to control the subjectivity bias. Moreover, Cronbach's alpha was used to check for data consistency.

4.15.2. Validity

Validity (what is being measured) is "concerned with whether the findings are really about what they appear to be about" (Saunders et al., 2007, p.151). It provides insight into the degree with which a measurement instrument "measures what the researcher is intending to measure" (Velde *et al*., 2004, pp.54-58). According to Kothari (2004), the term validity refers to "the extent to which differences found with a measuring instrument reflect true differences among those being tested". To this effect, the researcher used multiple items to measure a particular variable/practice. A pilot survey was also conducted at the two universities in Ethiopia with a specific group of staff members from selected schools/departments and the feedback provided resulted in a slight modification of the original questionnaire particularly regarding the measuring of the organisational justice construct. Moreover, one questionnaire was also reviewed by an academic working in the school of Management, IT and Governance at UKZN for the same purpose.

4.16. DATA ANALYSIS AND REPORTING

Data analysis is all about investigating variables, the relationships between variables and the patterns in these relationships (Mouton, 2002, p.166). Generally speaking, it involves to key steps: reducing to manageable proportions the wealth of data that one has collected or has available and identifying patterns and themes in the data (Mouton, 2002, p.161). This section is devoted to briefly explain these issues and largely focuses on the distinction between subjective and objective data analysis approaches as they were applied in the current study.

4.16.1. Quantitative data analysis

Analysis of quantitative data usually begins with the development of a 'data matrix' which in this case refers to the list of rows and columns that consists of the cases (respondents indicated in the row) and the variables (indicated in the columns). Accordingly, a data matrix was developed based on 596 responses from the academic staff members working in the three selected universities against demographic variables with 49 categories and 81 Likert scale items (75 of them measuring antecedents to academic staff intention to depart and 6 of them measuring the dependent variable, namely the academic staff intention to remain which was later reverse coded), giving rise to a total of 77,480 actual data (596 respondents by 130 variables). The data was first summarised in the form a spreadsheet and later exported to SPSS software version 24 for generating statistical results. After making sure that the data was ready for the analysis, the appropriate statistical domain was employed to generate the results that are presented in Chapter 5.

According to Mouton (2002, p.163), there are two "traditional domains of statistical analysis namely descriptive statistics and inferential statistics". Descriptive statistics, for instance, is "concerned with organising and summarising the data at hand (for instance the sample data), to render it more comprehensible" whereas inferential statistics "deals with the kinds of inferences that can be made when generalising from data, as from sample data to the entire (target) population" (Mouton, 2002, p.163). Black (2002, p.97) described it in a slightly different way refering to "the procedures that describe a set of data for a group to enlighten one of the characteristics of that group alone" whereas alternatively inferential statistics are "used to make inferences about larger groups (populations) based upon the data collected on the identified representative sample". The next part briefly highlights issues related to both descriptive and inferential statistics.

4.16.1.1.Descriptive statistics

According to Mouton (2002, p.163), descriptive statistics can be further divided into univariate, bivariate and multivariable analysis depending on the focus of the researchers. The author further noted that univariate, bivariate and multivariate analyses are employed when a single, two or more than two

variables are studied respectively. In this study, a univariate analysis was largely employed. The primary purpose of univariate analysis is to get a clear picture of the data by inspecting one variable at a time and it is presented in the form of frequency and percentage tables, graphs, statistical indices such as measures of central tendency and measures of dispersion (Mouton, 2002, p.163). This study employed frequency and percentage tables, graphs and charts as well some statistics such as mean and standard deviations in order to provide the reader with a much clearer and more manageable picture of data measuring both the dependent and independent variables. The second major category of statistical analysis is inferential statistics which is explained in the next section.

4.16.1.2.Inferential statistics

As indicated in the earlier section, inferential statistics is the second major statistical approach employed to analyse quantitative data. It involves using data collected from samples to make inferences about the larger population or populations (Black, 2002, p.140). For this particular study, the researcher employed ANOVA, FA and SEM to examine the influence of antecedents (demographic variables and other organisational related factors) on the academic staff's intention to leave. While ANOVA is meant to measure if there is any variation between the effect of selected demographic variables on the propensity of academic staff to remain in the three universities, factor analysis is a statistical technique aimed at minimising the number of observed variables into a fewer number of outcome variables by inspecting the covariation among the observed variables (Schreiber et al., 2006).

4.16.2. Qualitative data analysis

The data was first transcribed in the form of texts and the text was edited for language coherence without compromising the content of the transcribed information, the data were examined by means of thematic analysis and content analysis. The following step was pursued to analyse the data using thematic analysis. Thematic analysis involves the following steps: identifying, analysing and interpreting the data. The identification stage involved the generation of themes. The analysis stage involves an explanation of the themes. The last stage involves interpreting or giving meaning to the key findings along with their implications. Nvivo version 11 was employed to analyse the qualitative data.

4.17. ETHICAL CONSIDERATIONS AND LIMITATIONS

Research ethics refers to the appropriate moral values that must be applied by the researcher in the effort of conducting the research. Accordingly, before the actual study was commenced, the researcher obtained a certificate of ethical clearance from the UKZN Ethics Committee. In addition, permission was sought from the three case study universities: AAU, HU and the UKZN. The consent of the participants was also sought prior to their participation in completing the questionnaire as well as

responding to the face-to-face interview. The purpose of the study was explained prior to their participation and it was clearly stated that their participation was entirely free and voluntary. The identity of the participants was kept anonymous and any information provided by the participants was treated as private and was strictly used only for academic purposes. Lastly, the researcher duly acknowledged all the sources consulted during the process and, to ensure this, the Turnitin programme was used to test the similarity index.

4.18. SUMMARY

This chapter elaborated on the approaches followed during the journey of the research. It explained the research philosophy and paradigm, overall research methodology, research purposes and strategies, research purposes, duration of the study, research setting, sampling procedures and techniques, data collection method, construction of research methodology, data collection procedure, administration of data collection process, psychometric properties of the research instruments, data analysis and reporting, and ethical considerations pertaining to the study. It explained the approaches followed by the researcher to examine the effect of variables such as demographic factors and other factors such as QWL, OJ, JS, LMX, R&B and OCB on academic staff intentions to depart from three sub-Saharan African universities. In addition, the procedures followed to collect and analyse qualitative information collected from the key respondents were also thoroughly explained. Moreover, it also described the qualitative data collection approaches followed to collect data via key informants. The findings of this study are presented and analysed in the next chapter (Chapter 5).

CHAPTER FIVE

PRESENTATION, ANALYSIS AND INTERPRETATION OF FINDINGS

5.1. INTRODUCTION

This chapter portrays the results of the data obtained from academic staff members working at the three universities (AAU, HU, and UKZN) and the key information sources working at the same universities. The data analysis depends on two major sources: self-administered survey questionnaire and key informant interviews. The quantitative data which was collected via the self-administered questionnaire resulted in the collection of 596 usable questionnaires whereas the qualitative data was collected from 29 key informants (10 of them were from AAU, 13 from HU and 6 from UKZN) via face-to-face interviews with officials and senior academics from the universities. SPSS version 24 was employed for analysing the quantitative data whereas Nvivo 11 was used for analysing qualitative data. This chapter comprises an introduction, description of biographic information of the respondents, and descriptions of the effect of demographic factors on academic staff's propensity to leave. The chapter also presents the effect of factors such as QWL, OJ, JS, LMX, R&B and OCB on the academic staff's propensity to depart, using appropriate inferential statistical approaches such as EFA, CFA and SEM; and finally the chapter ends with the summary of the findings. The next sub-section describes the demographic characteristics of the respondents (for both the survey questionnaire as well as the key informants).

5.2. DEMOGRAPHIC CHARACTERISTICS

This sub-section presents the findings on biographic information of the respondents (both the questionnaire and key informant respondents).

5.2.1. Demographic characteristics of the survey respondents

The biographic information of the respondents include gender, age, university type, nationality, years of experience, level of education, academic rank, employment condition and status, average income, family status and areas of specialisation (see Figures 5.1 to 5.10).

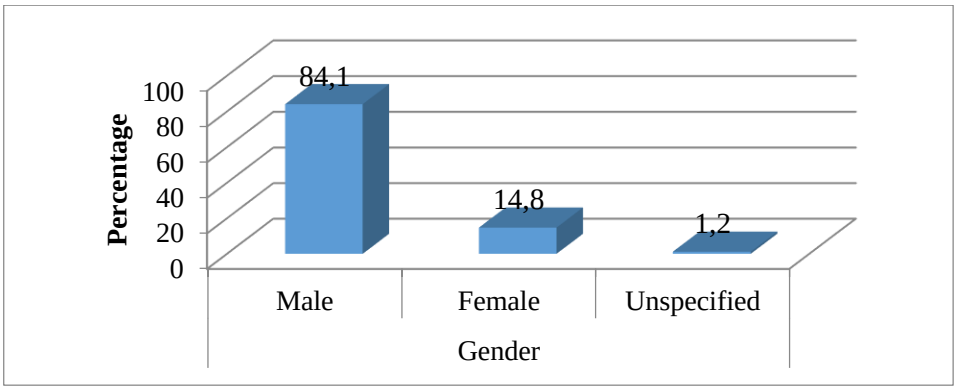


Figure 5.1: Percentage distribution of the respondents by gender groups

Source: Primary data (Survey, 2017)

Figure 5.1 shows that the majority of the respondents were male (84.1%) followed by female (14.8) and then an unspecified group (1.2).

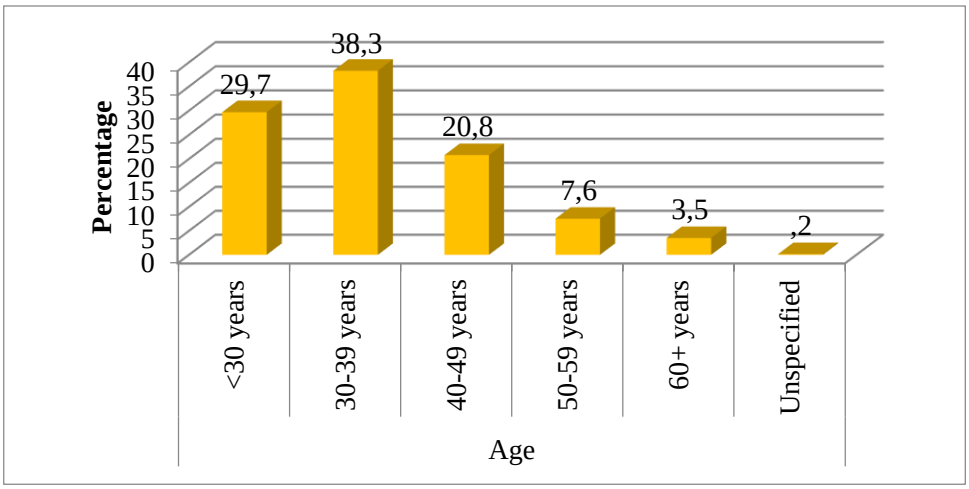


Figure 5.2: Percentage distribution of the age groups

Source: Primary data (Survey, 2017)

Figure 5.2 shows that a significant portion respondents were in the 30 to 39 age group (38.3%) closely followed by the less than 30 years group (29.7%) and then the 40 to 49 group (20.8%), the 50 to 59 years group (7.6%) and more than 60 years group (3.5%). Hence, close to 70% of the respondents were in the age groups of less than 40 years.

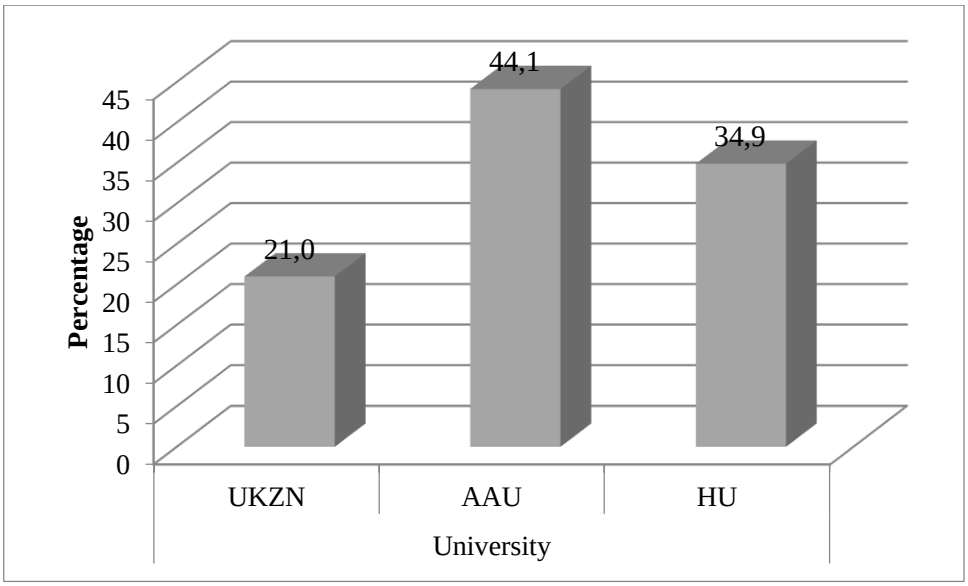


Figure 5.3: Percentage distribution of the respondents by university type

Source: Primary data (Survey, 2017)

Figure 5.3 shows that a significant proportion of the respondents were from Addis Ababa University (AAU) (44.1%) followed by Haramaya University (HU) (34.9%) and University of KwaZulu-Natal (UKZN) (21%). This response is closely proportional to the population of the target respondents.

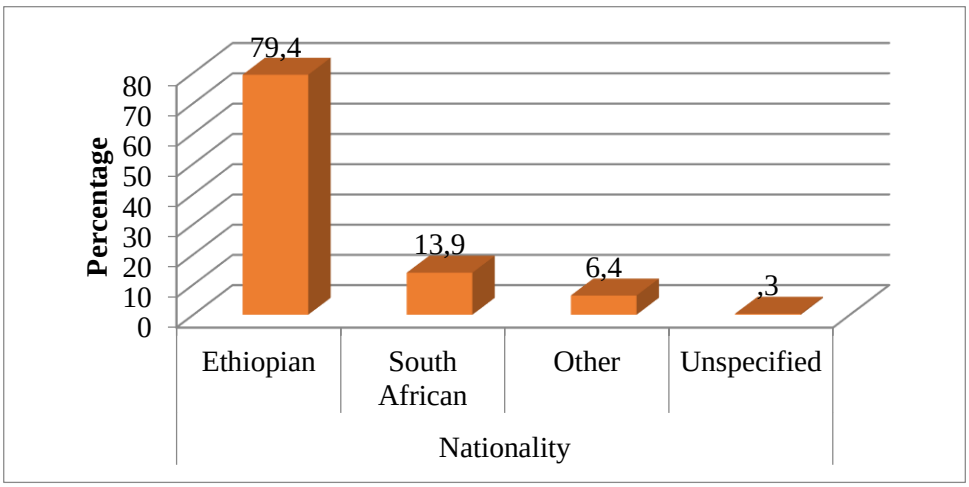


Figure 5.4: Percentage distribution of the respondents by nationality

Source: Primary data (Survey, 2017)

Figure 5.4 shows that a significant proportion of the respondents were Ethiopians (79.4%) followed by South Africans (13.9%) and then the rest of the foreign nationals from both institutions (about 6%).

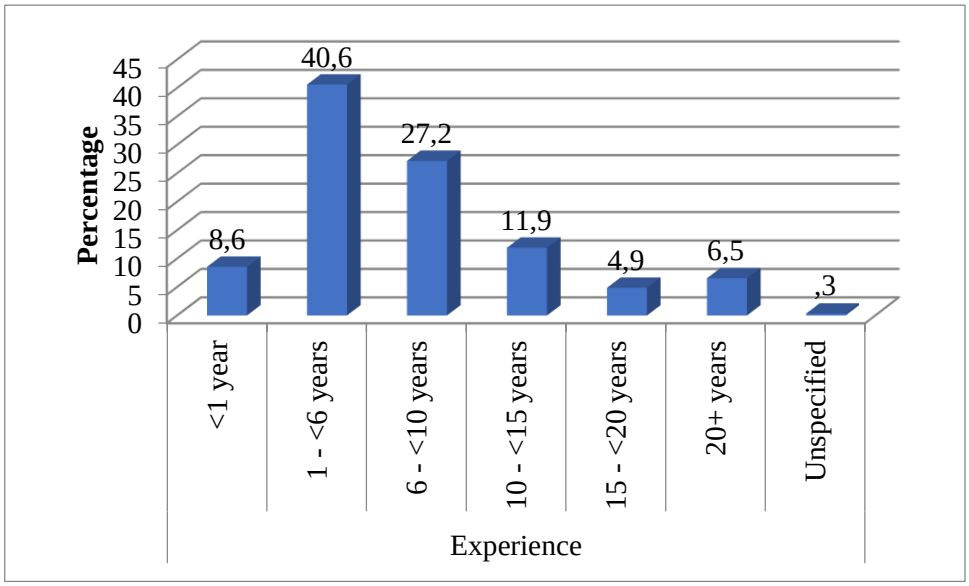


Figure 5.5: Percentage distribution of the respondents by years of experience groups

Source: Primary data (Survey, 2017)

From a tenure perspective, Figure 5.5 shows that a significant proportion of the respondents had worked between 1-6 years (40.6%) followed by between 6-10 years (27.2%), 10-15 years (11.9%), less than a year (8.6%), and slightly less than 10% of them had worked in the institution for more than 15 years.

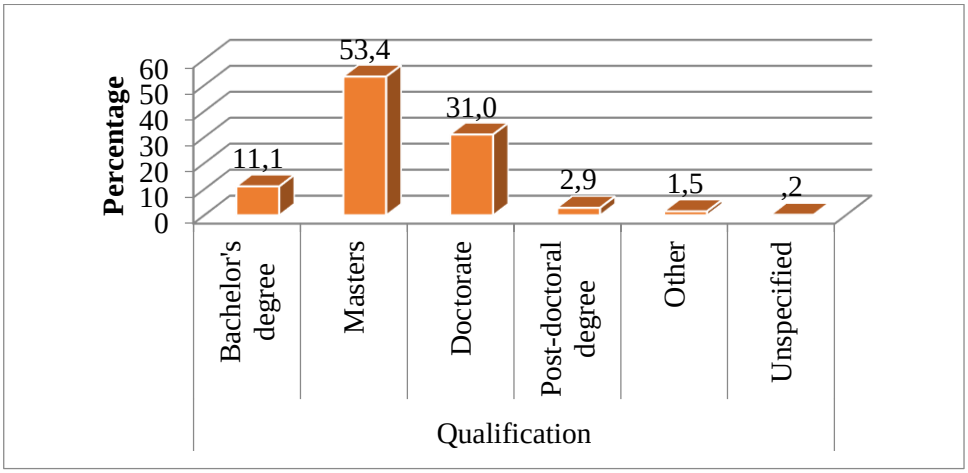


Figure 5.6: Percentage distribution of the respondents by educational qualification

Source: Primary data (Survey, 2017)

Figure 5.6 shows that significant proportion of the respondents hold a master's degree (53. %) followed by doctorate degree holders (31.0%), bachelor's degree holders (11.1%), and postdoctoral research fellows (2.9%), with other groups being slightly less than 2%.

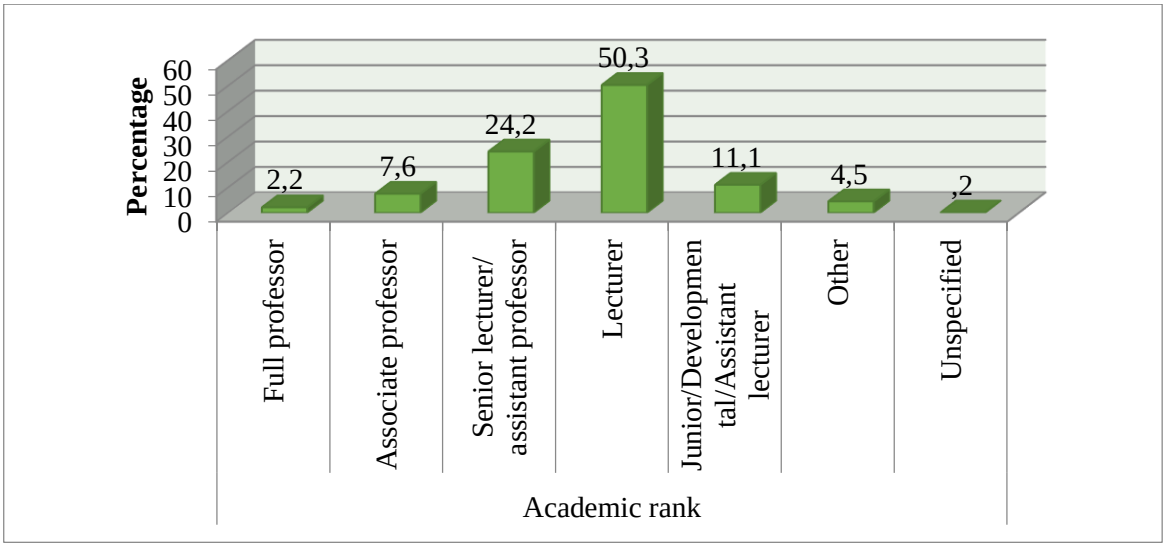


Figure 5.7: Percentage distribution of the respondents by academic rank

Source: Primary data (Survey, 2017)

Figure 5.7 shows that, at time of the research, almost half of the participants were working in the lecturer position with the next highest percentage working in the position of senior lecturer or assistant professor (24.2%), followed by junior/developmental/assistant lecturers (11.1%), with senior academics with the rank of associate professor and full professor making up slightly less than 10 % and the rest in the groups less than 5 %.

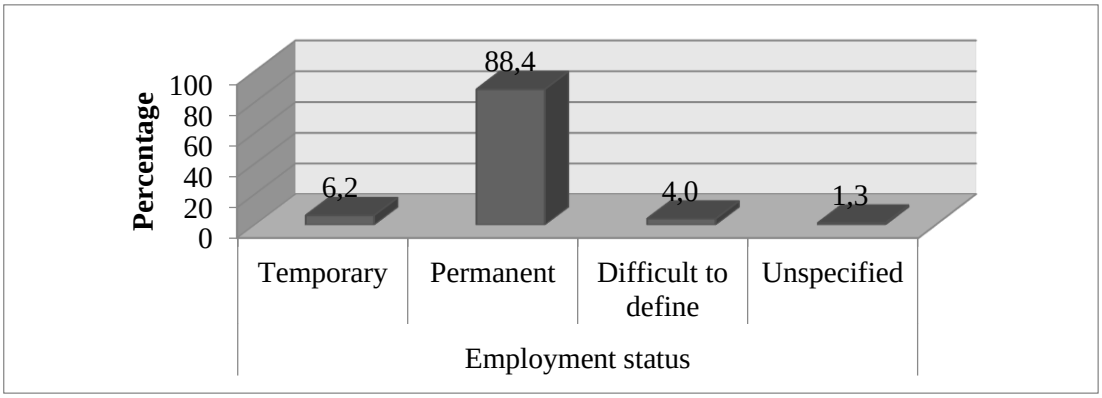


Figure 5.8: Percentage distribution of the respondents by employment status

Source: Primary data (Survey, 2017)

Figure 5.8 shows that a significant proportion of the respondents were permanent employees (88.4%) with very few of them categorised under temporary employment status (6.2%) and the rest were classified as 'difficult to define' (4%) and unspecified (1.3%).

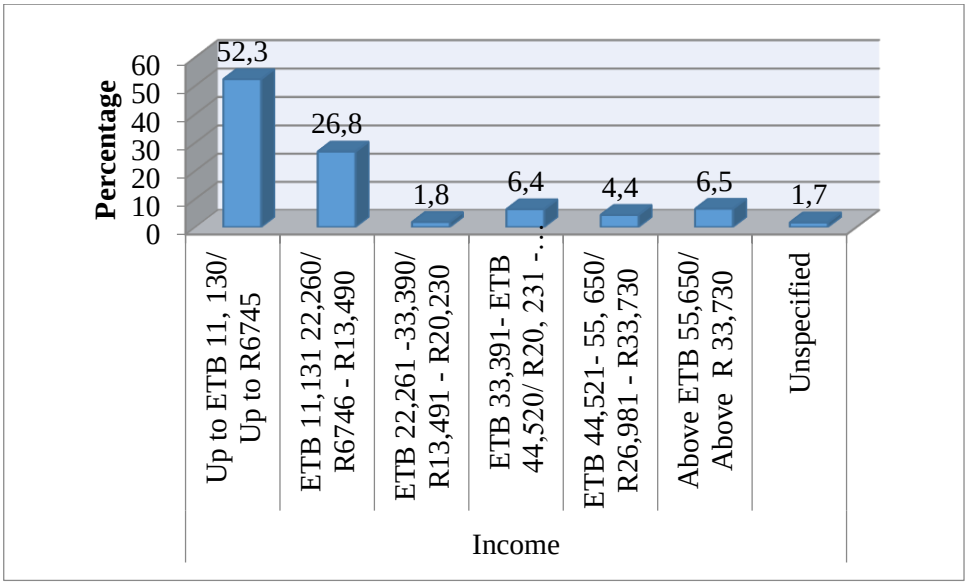


Figure 5.9: Percentage distribution of the respondents by income

Source: Primary data (Survey, 2017)

Figure 5.9 shows that, at the time of the research, a significant proportion of the respondents (52.3%) were paid the low salary of up to R6745 and very few of them (6.5%) were paid an amount higher than R33, 730. The highest paid academics were from UKZN whereas the lowest paid academics were from the two Ethiopian universities (AAU and HU). The salary structure in Ethiopia is homogenous across all public universities. The country adopted a 'one-size-fits-all' approach to salary structure without giving much consideration to the differing contexts of the universities due to either geographical location or local market structure.

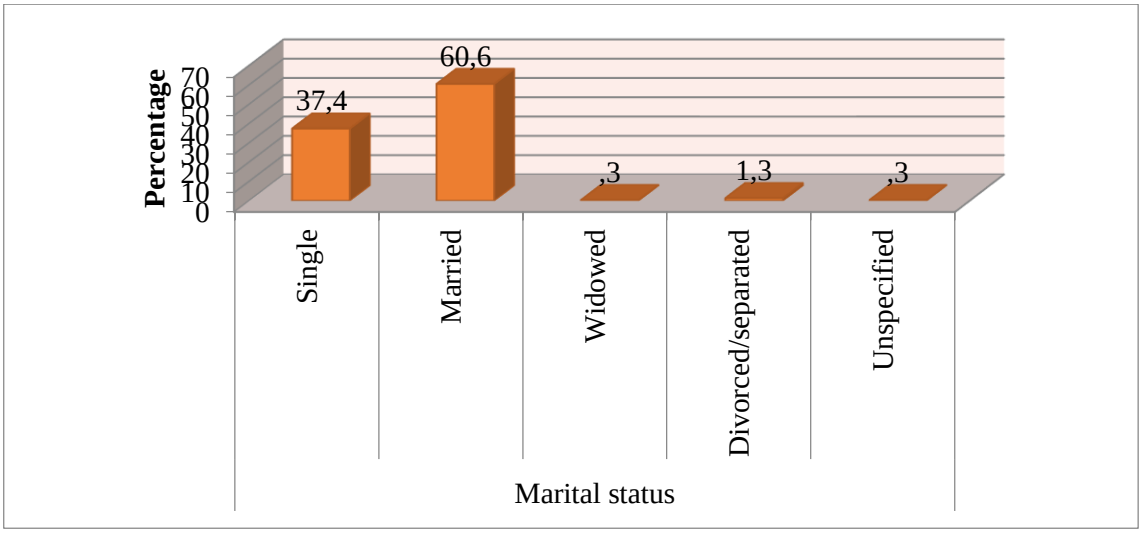


Figure 5.10: Proportion of the respondents by marital status

Source: Primary data (Survey, 2017)

Figure 5.10 which reflects respondents' marital status, shows that a significant proportion of them were married (60.6%) followed by a single (37.4%). However, a few of them were categorised under widowed (less than 1%), divorced/separated (less than 2%) and unspecified (less than 1%).

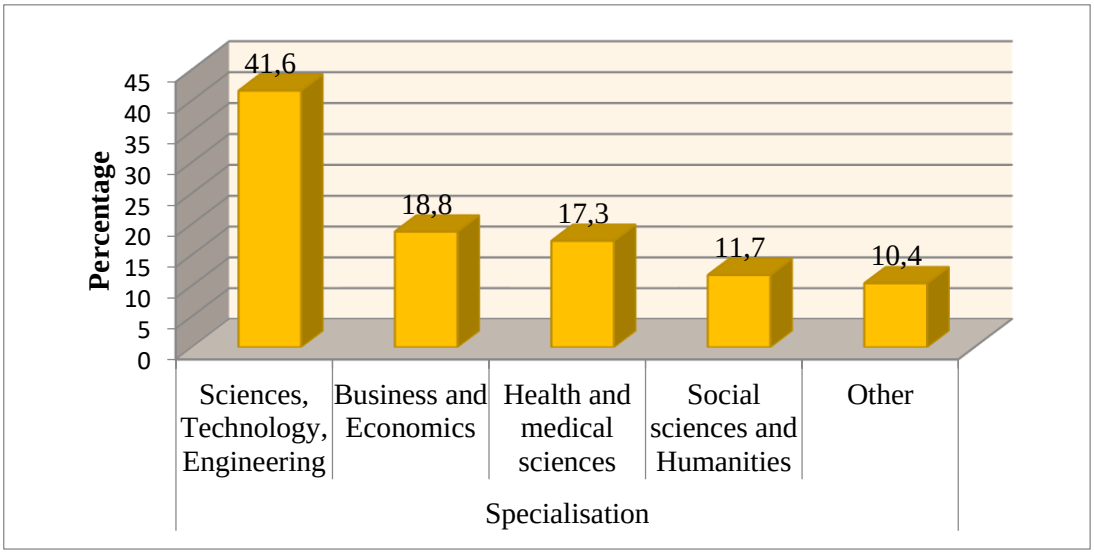


Figure 5.11: Percentage distribution of the respondents by areas of specialisation

Source: Primary data (Survey, 2017)

Figure 5.11 which illustrated the distribution of the participants vis-à-vis specialisation indicates that the majority of them were from Sciences, Technology and Engineering fields of specialisation (41.6%) followed by Business and Economics (18.8%), Health and Medical Sciences (17.3%), Social Sciences and Humanities (11.7%) and other (10.4%).

5.2.2. Profile of the key informant interviews

This section of the chapter describes the profiles of the key informants based on gender, age, years of experience, qualification, academic rank and position across the three universities.

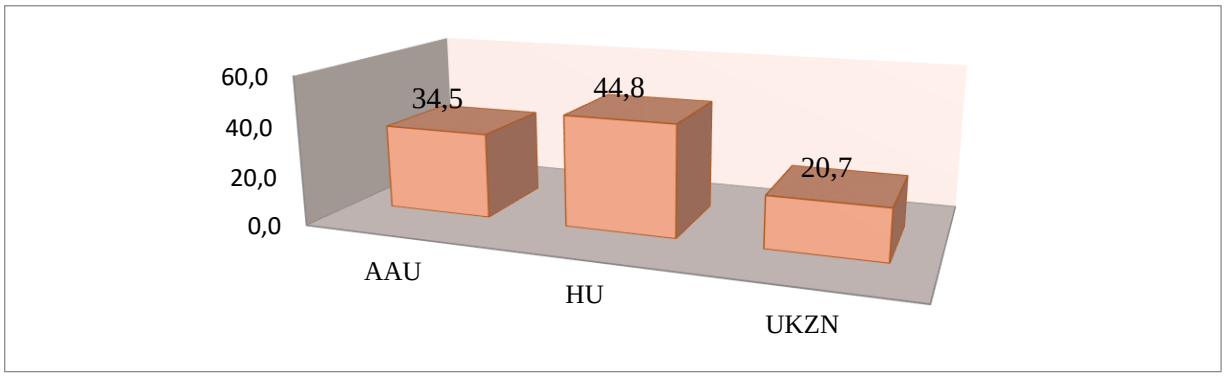


Figure 5.12: Distribution of the key informants across the three universities

Source: Primary data (Key Informants, 2017)

As illustrated in Figure 5.1, of the 29 key informants approached for the interview, the majority informants were from HU (44.8%) followed by AAU (34.5%) and then UKZN (20.7).

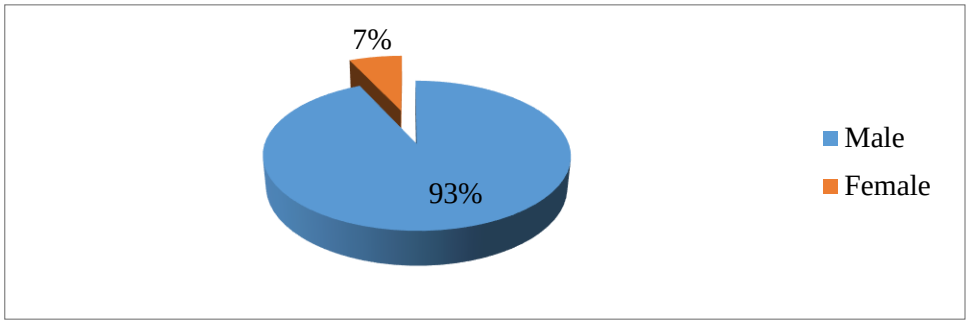


Figure 5.13: Gender distribution of the key informants across the three universities

Source: Primary data (Key Informants, 2017)

As shown in Figure 5.2 above, a significant proportion of the key informants were male (93%) with only a few female respondents (7%). When seen across the three universities, none of the respondents from the two Ethiopian universities were female, implying that at the Ethiopian universities, it is rare for females to be in key positions especially such as deanship and above.

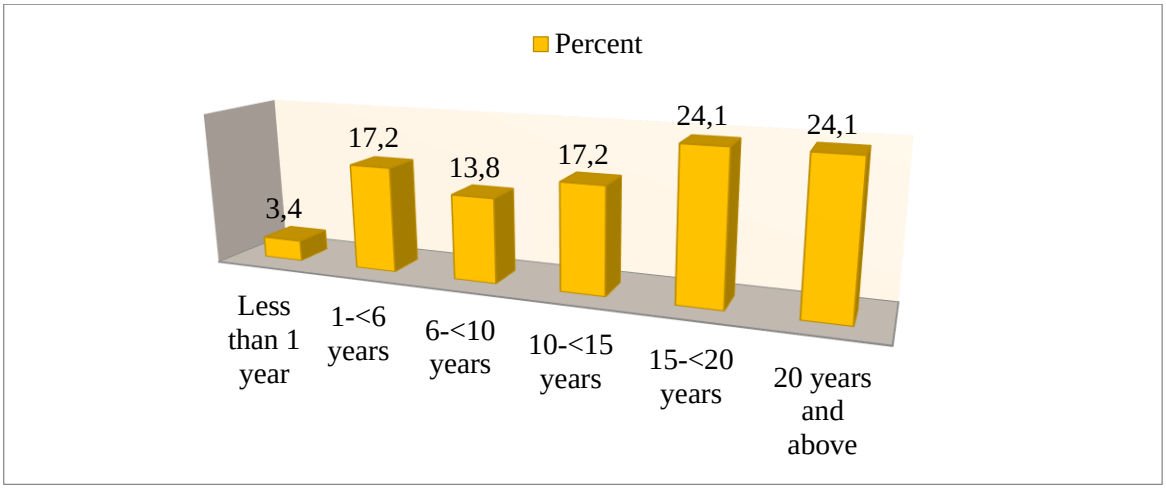


Figure 5.14: Distribution of key informants by years of experiences

Source: Primary data (Key Informants, 2017)

Figure 5.3 shows that a significant proportion of the key informants had more than 15 years of experience at their universities (48.2%). About 31% of the respondents had between 6 to 15 years of experience.

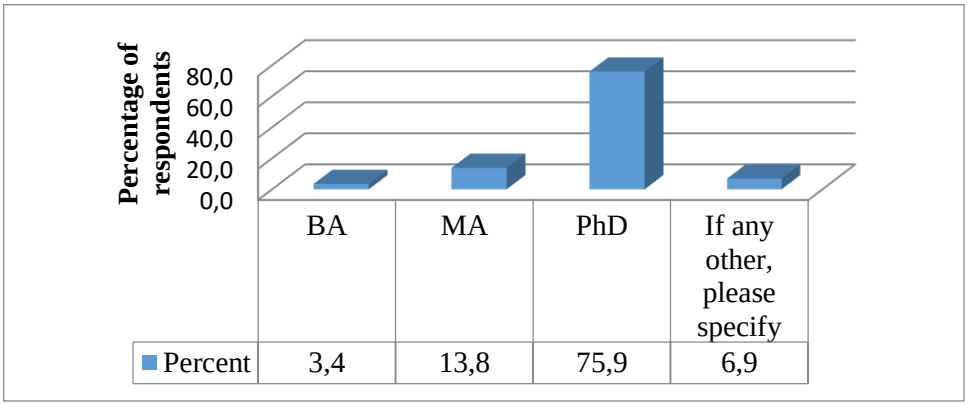


Figure 5.15: Distribution of key informants by educational qualification

Source: Primary data (Key Informants, 2017)

As illustrated in Figure 5.4 above, a significant proportion of the key informants were PhD holders (75.9%) followed by master's degree holders (13.8%), with less than 5% of them being holders of a bachelor's degree.

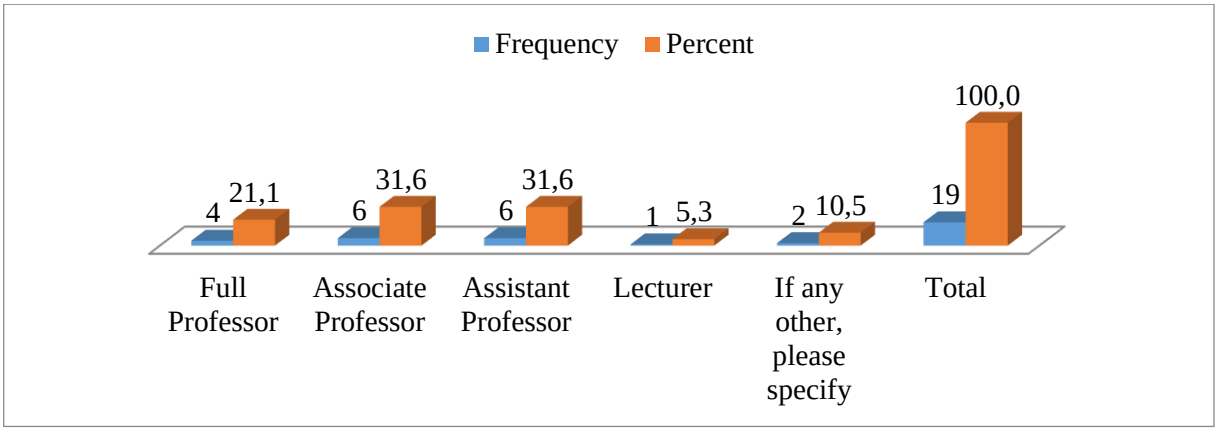


Figure 5.16: Distribution of key informants by academic rank

Source: Primary data (Key Informants, 2017)

As can be seen in Figure 5.5, a significant proportion of the respondents were working as assistant professor (34.5%) in the academic hierarchy. In addition, an equal proportion of the key informants was working in the positions of full professor (27.6%) and associate professor (27.6%) with very few people working with the rank of lecturer and others (less than 10%). This shows that the majority of the key informants were highly profiled with close to 90% of them starting from assistant professor positions.

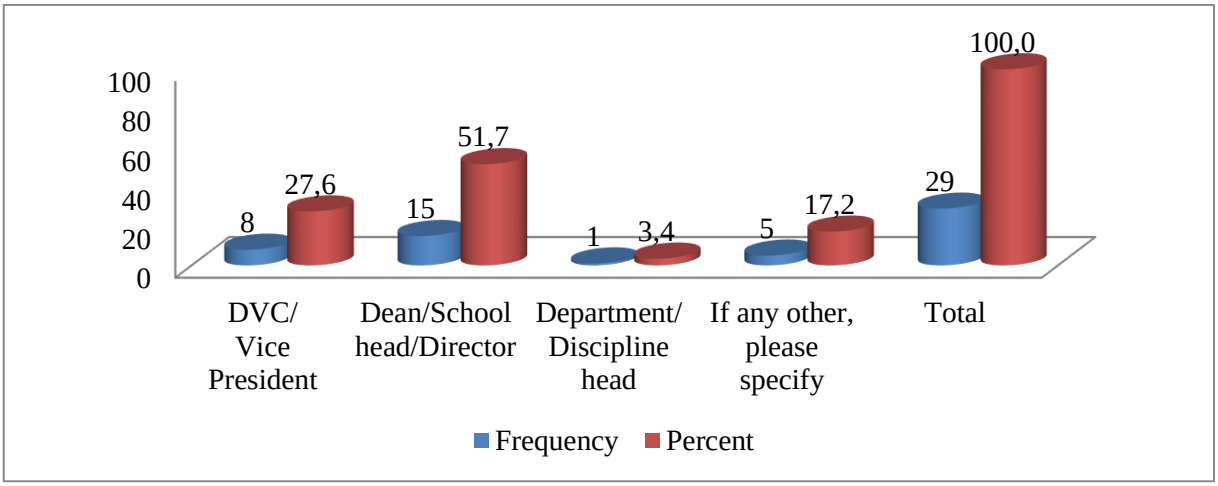


Figure 5.17: Distribution of the key informants by designation

Source: Primary data (Key Informants, 2017)

As illustrated in Figure 5.6 above, a significant proportion of the key informants were holding the positions of dean, school head or director (51.7%) whereas close to 30 % (27.6) percent of the key informants were working in the positions of deputy vice-chancellor or equivalent of vice president positions in the context of Ethiopian universities.

5.3. HIGHER EDUCATION IN CONTEXT: STATE, CHALLENGES, AND CONSTRAINTS ACROSS THE TWO COUNTRIES

The thematic analysis designed to understand the context of higher education in the two countries in general and the three universities, in particular, has resulted in the emergence of 13 major themes as key challenges facing higher learning institutions across the three universities. A few of the themes were relevant to the respective universities and these are effectively described under each university.

5.3.1. State and challenges of higher education in Ethiopia: The cases of selected universities in Ethiopia

An assessment of qualitative information with the objective of understanding the context of Ethiopian higher education (taking the cases of two universities – AAU and HU) revealed that there are common trends facing the sub-sector. The following sub-section presents some of the key challenges facing specific universities.

5.3.1.1. The case of Addis Ababa University

Key informant interviews held with ten people at AAU consisting of administrators, academic leaders and prominent professors revealed that the university is currently facing challenges with respect to human resources management, facilities and infrastructure, funding, scholarly engagement and intensification, teaching style and curriculum, quality of education, language policy and governance and leadership. The views of the key informants are summarised in the following paragraphs.

5.3.1.1(a) Human resource management-related challenges

With respect to human resources management, ‘salary’ surfaced as one of the key areas that needs intervention if the university has to retain its highly qualified and prominent academics, including emerging and young academics. The lack of competitiveness of the salary scale in government-funded universities in the Horn of Africa in general and Ethiopia in particular is hampering the capacity of the institutions to ‘attract and retain’ the best minds (Key informant_AAU_01, January 2017). One of the key informants from the university described it as follows: “There has to be a differential pay system and the staffs need to be hired on a competitive basis. There is one flat salary for everybody whether you achieve higher or not. The educational system doesn’t have any mechanism for talent attraction and talent retention and from the faculty wise there is no motivation mechanism for people to excel. There is no any system to differentiate between good performers and poor performers" (Key Informant_AAU01, January 2017). From this statement, it is clear that the salary system in Ethiopian higher education system is neither competitive nor does it differentiate between good and poor performers to enhance the overall institutional productivity or efficiency. Another key informant from the same institution believed that "...regardless of the government's continuous salary adjustment for

academic staff, still it is not on par with the market price that the Ethiopian market pays. You see people scramble for leaving the country or search for alternative jobs in the private institutions. That definitely drag their energy to many commitments and as a result, you may not expect quality deliverables from professors" (Key informant_AAU02, January 2017). Furthermore, another key informant from the same university indicated that the challenge related to salary at AAU is something beyond an issue of magnitude; rather, it has to do with the strategy pursued by the respective universities to compensate its staff members (Key Informant_AAU03, January 2017).

Another key human resource-related challenge identified during the interview was the 'limited human resource capacity'. An interviewee in a strategic position from Addis Ababa University Institute of Technology (AAUiT) indicated that the institute still has a low profile of academic staff paralleled with the increased number of pupils in the institute. The key informant's opinion was that: "If you look at the human resource profile, it is not that much high although this is the biggest and the oldest institute of technology in the country. Overall about 23% of the faculty members are PhD holders and above and the rest are lecturers, graduate assistants, and technical assistants. The human resource is quite limited to nurture other universities and the dynamics of the industry. You can imagine the gap. We have roughly 12,000 students and the human resource profile is one of the critical challenges" (Key Informant_AAU02, 2017). Another key informant indicated that many more human resources are needed to deal with an ever-expanding number of students (estimated to be around 52, 000 students) (Key Informant_AAU03, 2017). Another key informant from the same institution witnessed that there is not enough academic staff for the universities (Key Informant_AAU04, 2017). A key informant from the same institution argued that although AAU stands better compared to other sister government universities in the country in terms of having the required quality and quantity of academic staff, there is still a limited number and quality of academic staff in order to execute the mission and vision of the university (Key Informant_AAU08, 2017).

The third human resource challenge identified by the key informants was related to the 'qualifications' of the academic staff members. Two key informants from the university underlined that the absence of qualified and competent academics is indeed among the critical challenges encountering the sub-sector in general and AAU in particular. One of the key informants indicated that "… the lack of qualified academic staff to run the university business" as another key challenge facing the university. The key informant further noted that "We [the university] are very much ambitious and have expanded the postgraduate program and most of our staff members are expected to promote themselves to the next higher level. We [the university] lack the number of qualified academic staff both at the graduate and undergraduate level" (Key Informant_AAU07, 2017). Another key informant from the same university argued that the scarcity of qualified and competent academics in the system has to do with the pressure from the labour market/industry and this is particularly true for people with specialised

skills such as engineers and physicians (Key Informant_AAU02, 2017). This study thus highlights that perceptions of academic staff regarding their career advancement in the university system is gradually changing and they are mostly running away from the vertical increment through the attendance of PhD programmes. A key informant indicated that: "As it's quite contrary to the cases where before 20 or 50 years academic staff members prefer to continue their PhD studies as part of staff development program but today there is huge demand from the market"(Key Informant_AAU02, 2017).

The fourth challenge related to human resource issue referred to 'staff engagement'. In this respect, the key informant stated that one of the biggest challenges facing the institute at AAU was the poor of engagement of academic staff members in the execution of the mission of the university in the way that they do in the industry in the form of training and consultancies (Key Informant_AAU07, 2017).

5.3.1.1(b) Resource and infrastructure

The issue of resource and infrastructure is another key challenge facing the university next to the human resources management-related challenges. Quite a number of key informants from AAU described that limited resources, poor access to facilities, and infrastructure were limiting the university in terms of executing its mandates: teaching-learning, scholarly as well as community engagement. A key informant argued that despite government's massive investment in the higher education sector (both financially and infrastructure wise), the insignificant amount is allotted to research and development, discouraging scholarly engagement in the higher education landscape (Key Informant_AAU01, 2017). Information obtained from the key informant in the College of Natural and Computational Sciences revealed that there is a "mismatch" between the student population and the facilities mentioning that "some accesses are not easy such as library and internet as the campus is narrow and we are not able to expand due to space limitations. The facilities we are using were actually established for maybe 200 students in the previous times. There is a mismatch as there is no balance between the resources and the students"(Key Informant_AAU05, 2017). Another key informant from Addis Ababa Institute of Technology (AAiT) also identified 'infrastructure' as the second key challenge facing the institute next to the 'shortage of qualified human resources' (Key Informant_AAU02, 2017). The respondent further iterated the 'space limitations' including laboratories, classrooms and faculty offices, stating that there were about 10-12 staff members seated in one room. The key informant argued that the shortage of laboratory facilities is the critical challenge that jeopardises the performance of the institute.

5.3.1.1(c) Funding challenges

Funding is a cross-cutting issue in the higher education landscape regardless of the socio-economic, political and technological development of the nation states. Although the sources of funds vary among

institutions, it is the lifeblood of an institution to execute the mission of the university. Almost all public higher learning institutions in Ethiopia, without exception to AAU, are exclusively funded by the government and they rarely generate their own income. A key informant from the university indicated that "the capital budget allotted for laboratories is limited due to aggressive government's expansion agenda which apportions the already limited national budget across competing activities (Key Informant_AAU02, 2017). As much as there is limited funds, a key informant from the same university working in a high-level administrative position indicated that there is a lack of "'competent financial managers, supply chain specialists, and managers to run the budget" (Key Informant_AAU03, 2017). The shortage of human resources arises out of the fact that 'the pay system is meagre' and it is not able to retain qualified support professionals though they manage an average annual budget of ETB 2.5 billion (Key Informant_AAU03, 2017). The other challenge has to do with the rigidity of the 'financial rules and regulations'.

5.3.1.1(d) Research intensification

The analysis of qualitative data revealed that there is a low level of research productivity and the subsequent research output owing to the limited amount of funds allotted for research activities and the low level of engagement of academics on the research activities. The government has recently started allocating a research budget to universities with the objective of motivating them to involve in scholarly activities. However, the amount allotted for research is marginal compared to the total fund allocated for research.

Although research is theoretically considered as one of the pillars in the tripartite mission of the university as specified in the higher education proclamation of the country regulating higher learning institutions, there is a lack of a mandatory system or research policies on the side of the university that motivates academics to engage in compulsory research activities. Most of the Ethiopian universities, especially the newly established ones, are merely teaching universities. In this respect, the key informant suggested that universities had to "change or evolve into research university" without losing its first mission (teaching-learning) (Key Informant Interveiw_AAU04, 2017). The key informant further suggested the expansion of postgraduate programmes including PhD level as an entry point for initiating research activities in the university system.

Another key challenge with respect to research was its relevance to the socio-economic, political and technological advancement of the country and in terms of accelerating social transformation with the aim of improving their livelihoods at the grassroots level. The key informant stated that: "… The research output [by the university] is not applicable to the development of the nation. Most of the research in higher education are[were] left on the shelf instead of being applied because there is[was]

no strategy on how to disseminate the research output to the community or scientific community at large and that is another challenge in my opinion" (Key Informant Interveiw_AAU05, 2017).

5.3.1.1(e) Teaching style, curriculum and the lack of integration with the labour market

Curriculum implementation was also identified as a key challenge in the higher education landscape, given the dynamics of the global and national macro environment within which the universities are operating and working. A key informant from AAU, a full professor who had served the university for more than 35 years, was of the opinion that the teaching style and curriculum implementation in Ethiopian higher learning institutions in general and the AAU in particular, is largely oriented towards a theory than practical activities. The key informant stated that the delivery system does not add value to the students as much as it is needed by the labour market, noting that: "Even to be a teaching university, you have to teach in such a way that students own it. At least in AAU, we try to do it. In other universities, they take our notes, teach it and they don't know what it means"(Key Informant Interview, AAU04, 2017). Furthermore, the lack of alignment between what the universities teach and the skills needed by the industry is another key challenge facing the 21st century higher education. The key informant argued that "…there is a mismatch between the curricula and the skill needs of the industry-education that we give in the university may not be directly used by the industry. The key informant stated that "the skill, knowledge, and expertise need of the industry and what the university produces does not match"(Key Informant Interview, AAU04, 2017).

5.3.1.1(f) Quality of education

Quality of education is also another trend that emerged as the key challenge facing the higher education sub-sector as per the key informants from AAU. Overall, there was the perception among the key informants that 'quality of education' has been declining over the last decades owing to massive expansion and the subsequently increased student enrolment across all universities, among others. A key informant from AAU indicated that "Quality of education is one of the major issues resulting from expansion"(Key Informant Interview, AAU05, 2017). He attributed the problem of poor quality of higher education to the strength and preparedness of the "incoming students" in the "value chain". Another key informant attributed the problem to the lack of proper engagement of academics owing to the lack of a proper performance management system for the academic staff members, stating that "There are again academic staffs that come in and teach the bare minimum and come and collect that salary every month. For some, that is good enough to survive but it doesn't help the university to progress. The higher education pay should be based on results, performance, and productivity… those who survive on bare minimum effort and those that go the extra mile to produce more research outputs need to be differentiated"(Key Informant Interview, AAU08, 2017). Another key informant from the same institution with the rank of professorship and who at the time of this study had served for more

than 35 years in the university stated that "In Ethiopia, there is a big debate or discussion on quality education. So, quality of education means the relevance of education and the programs and the relevance of educated people in terms of work and creating added value and making a national productivity and national life bigger and higher"(Key Informant Interview, AAU10, 2017).

5.3.1.1(g) Language policy

A number of prominent academics and researchers from AAU indicated that the language capability of the students is deteriorating, stating that "…. English is the language of instruction in the university and it is getting deteriorated from time to time. As far as we are using English as a language of instruction, students need to improve their English language proficiency to write, read, listen and speak fluently. It is far from changing the language of instruction in Ethiopia to one of the local languages as Ethiopia is a much-diversified country with so many languages and ethnic identities. Therefore, English is the necessary evil that students need to learn to become proficient"(Key Informant Interview_AAU06, 2017).

5.3.1.1(h) Education system/Standardisation

Many respondents indicated they believe that the opening of universities in Ethiopia is partly politically motivated and this has largely compromised the quality aspect of the system. In this respect, an academic from AAU was of the opinion that the number one challenge facing the sector emanates from the 'system' or 'educational system' and stated that "… there is no policy on staff retention, attraction, and the system does not take into account the minimum requirement to establish a new university" (Key Informant Interview_AAU09, 2017). The key informant further stated that "There is no bare minimum requirement specified in terms of Higher Education Relevance and Quality Assurance (HERQA) and as a result quality is compromised" (Key Informant Interview_AAU09, 2017). In the recent past, the higher education system has been passing through change and transformations in terms of the number of courses offered and the number of years it takes to finish a degree programme. The key informant described that: "The other new development is the general education program. It was used to be given to the students in their first years but it was pushed down to preparatory schools and we are not sure if they are taking those courses in the preparatory schools or not. Courses such as philosophy, logic, sociology, geography etc. are already removed from the curriculum and we really doubt on the holistic competence of the graduates"(Key Informant Interview_AAU06, 2017). In terms of curriculum content, the duration for students to earn the degree has become shorter and shorter over the last four decades with the informant stating that "The curriculum is improved over 40 years. But due to the government policy of reducing the number of years to deliver the curriculum from 4 years to 3 years, the delivery time was shortened. It is

challenging to deliver the curriculum within the time framework" (Key Informant Interview_AAU06, 2017).

5.3.1.1(i) Leadership and governance

A key informant from AAU pinpointed that the higher education system is characterised by 'poor management" which resulted in the "poor "poor implementation of policies and strategies" as stipulated in the following quotation (#1):

"The challenge is poor management. We are never short of policies and strategies but we fall short of implementation. There is poor implementation of policy and guidelines. There is poor diversity management" (Key Informant Interview_AAU01, 2017). Another key informant from the same institution pinpointed that the procedures the university follows in appointing university leaders is slightly based on 'meritocracy'. In the words of the key informant: "There are things that need to improve with regard to the management, the officials in university management from the president to down. It is an appointment way and not merit-based and that has to change"(Key Informant Interview_AAU08, 2017). The key informant suggested improvement of the university management system especially in the appointment of university leaders through a transparent and merit-based approach.

5.3.1.2. The case of Haramaya University

An interview was held with 13 key informants from the university and the findings based on information obtained through interviews are presented as follows. Among the key challenges facing the university were issues related to human resources management, resource, and infrastructure, funding, research intensification, teaching style and curriculum, quality of education, language policy, educational system/standardisation, massification, physical setting or location, and governance and leadership. Each of these sub-themes is described in the following paragraphs.

5.3.1.2 (a) Human resource-related challenges

The first key challenge related to human resources management was 'salary level and its competitiveness'. Despite the existence of competent staff members in the university, the pay level is very low to the extent that it is not able to retain them. One of the key informants cited that pay is one among the three major factors next to locational disadvantage and the absence of talent management strategies causing academic staff turnover in the university (Key Informant Interview_HU02, January 2017). In the past, despite a low salary, people with excellent academic track records preferred to work in higher learning institutions due to the sense of pride it generates for working in the system. However, this perception has gradually declined due to the declining public opinion of the academics (Key

Informant Interview _HU08, January 2017). Another key informant reiterated that ‘salary gap’ between the private companies and the public institutions is the main reason for the lack of retention of competent and experienced and young academics in the university (Key Informant Interview _HU09, 2017).

Key informants from the university raised an issue of ‘equity’ in relation to the payment system. They argued that there is a huge variation between what the academics get in the university and what is being paid to people with equivalent positions elsewhere in the industry. The key informant further elaborated with respect to salary and incentives that: “The salary is not comparable. The salary for engineering faculty and those who are working in the industry are not the same. It dramatically varies. Those graduates of business in the industry get salary two or three times those who teach in the university. There is no incentive package for academic staff working in Ethiopian higher education. This discourages competent academic staff not to work in universities and prefer to work in industries or non-government organisations or even may prefer to go abroad"(Key Informant Interview _HU05, January 2017). Another key informant from the university confirmed the idea stating that “The private sector is getting more attractive than the government sector. This is not only in universities but also in other government organisations. This might continue until the market is balanced with the demand and supply. People are leaving because of the relatively low pay" (Key Informant Interview _HU06, January 2017).

The second key issue related to human resources management at HU was that of “limited human resource capacity”. In this respect, one of the key informants underlined that there is a precarious and chronic scarcity of academic staff in the institution particularly in the fields of Veterinary Medicine owing to the failure of academic staff to return home after attending their postgraduate studies abroad. The key informant stated that: "The staff profile is a very challenging issue….Staff members who went for further studies are not coming back. The staff profile is very low"(Key Informant Interview _HU01, 2017).

The third key challenge was related to the ‘qualifications’ of the academics staff members beyond their numbers. The key informants were of the opinion that the level of qualification of the academics staff members in the university has been declining from time to time and hence, the university has ill qualified and incompetent scholarly staff. One of the academics from the College of Educational and Behavioural Sciences indicated the challenges in this respect as follows: "Universities have a scarcity of teachers with appropriate qualification. We have Ph.D. program and we don’t have a sufficient number of instructors in the job market, we don’t have access to publishing in terms of journals-teachers are facing a serious challenge in this regard in terms of having access to the journals and staff are being affected seriously in terms of their academic career. But why? Challenges related to staff development"(Key Informant Interview _HU13, 2017). From this, we can see that the lack of

qualification is partly attributed to the lack of academics to have access to academic publishing facilities such as journals (especially international ones) and the lack of well-integrated staff development initiatives in the areas of soft skills in addition to the formal training that leads to awarding of degrees. Some of the key informants believed that getting academic staff with the right qualifications is hardly possible for both local and international staff owing to the lack of competitive salary (Key Informant Interview _HU02 &13, 2017).

Moreover, the respondent stated that: “The shortage of qualified staff has limited the capacity of the university to expand postgraduate studies and forced it to limit itself to undertake undergraduate studies in various departments” (Key Informant Interview _HU13, 2017). Other key informants also added to this, for example, "Shortage of qualified academics are … constraining the universities in general and Haramaya University in particular in terms of producing qualified human resources for the nation" (Key Informant Interview _HU02, 2017). Another respondent was of the opinion that “incentives related to salary and the lack of enabling environment” are the reasons for the lack of qualified staff with serious repercussions on the quality of the graduates.

The fourth key and dominant human resource challenge at HU, as per information obtained from the respondents, related to issues with ‘retention of qualified academics’. The majority of the key informants were the opinion that the university is facing a serious challenge in terms of retaining its senior and seasoned academics or professors especially those with terminal degrees, which is impacting the sustainability of the sub-sector in the country and the university in particular (Key Informant Interview _HU09, 2017). The key informant thought that: "…the first big challenge for running higher education sustainably in Ethiopia or maybe at HU is retaining qualified manpower. There is high staff turnover especially qualified and seasoned professors in search of better jobs. This is one serious challenge"(Key Informant Interview _HU09, 2017).

Another key informant from the College of Veterinary Medicine signaled that the departure of academics for postgraduate training to the developed countries is one among the routes taken by academics to depart from the university. One of the key informants working in the dean position at the university stated that: “Retaining senior people especially with Ph.D. is the main challenge in our case. Getting them back those who went for further studies abroad or locally is another challenge. Once they are going for Ph.D. it is very unlikely that we will get them back. The USA is like a ‘Bermuda triangle’ because there is no single staff that came back after attending their postgraduate program over there"(Key Informant Interview _HU04, 2017). The lack of “integrated retention policies and strategies as well as well-designed succession planning” has contributed to challenges (Key Informant Interview _HU07, 2017). Moreover, the “locational disadvantage” was stipulated as one of the reasons for the departure of academic staff from the university (Key Informant Interview _HU13, 2017). Others indicated that the “lack of sufficient benefit packages like life insurance and fuel allowance for

cars and others" as the main reasons for the departure. It was observed during the interview process that, there is no mechanism in the university to know the reasons why academics leave the university other than stipulating the reasons. In terms of skill profile, people with technical skills are the ones vulnerable to the departure from the university (Key Informant Interview _HU09, 2017).

The fifth key human resources challenge was 'staff development'. The key informants argued that the "lack of qualified and skilled personnel" in our case "academics" is attributed partly to the absence of formally structured, integrated training and development programmes both in the short-run and the long run. "The need to have staff development plan" (Key Informant_HU05, 2017) and the need for "capacity development" (Key Informant Interview _HU08, 2017) were some of the key issues raised during the interviews to enhance the skills (both hard and soft skills) and qualification of the academic staff. It is not only the absence but also those who are trained at a higher level are not qualified to the extent that they are expected partly due to "factors emanating from 'vicious cycle' of staff development" (Key Informant Interview _HU10, 2017).

The sixth key challenge which is partly related to the fourth one was 'brain drain'. Two of the key informants from Haramaya University highlighted that brain drain is among the top challenges encountering the institution. They indicated that "many staff members are leaving the university to other sectors and other countries" though actual figures were not accessible due to the lack of systematic data capturing in the university system (Key Informant Interview _HU02, 2017). Another key informant from the same university indicated that "brain drain" is seriously jeopardising and hampering the performance of the university (Key Informant Interview _HU08, 2017).

The seventh key human resources challenge was the 'declining job satisfaction' of academics over time and the 'declining public values' towards academics (Key Informant Interview _HU08, 2017). The findings obtained through the interviews suggest that there is a tendency of 'declining job satisfaction' among academics over time, the major factor influencing academics to remain even in the absence of sufficient pay or low level of pay. A key informant who is an associate professor who served the university for more than 30 years eloquently described how the job satisfaction of academic staff is gradually declining in the sub-sector by stating that: "…When I see my seniors most of who are not in the university now, the money they get were very low but they have stayed longer in the university because they were satisfied by their jobs. There was personal satisfaction. Today the job satisfaction becomes reduced and people do not care if they are working in the university or not" (Key Informant Interview _HU08, 2017).

5.3.1.2 (b) Resource and infrastructure

The resource and infrastructure sub-theme was also cited as the visible bottleneck at the forefront of the Ethiopian higher education as there is significant mismatch between the student population due to the government expansion policy and the available facilities and infrastructure in the university. The data obtained through the face-to-face interviews revealed that "the existence of the mismatch between the demand for and supply of facilities such as laboratory infrastructure and inputs such as chemicals and detergents have negatively impacted the quality of education in the system" (Key Informant Interview _HU11, 2017). Moreover, there is a "shortage of facilities such as classrooms, laboratories, and staff offices, etc." (Key Informant Interview _HU12, 2017). Even if they are available, the facilities are not up-to-date and hence "compromising quality" (Key Informant Interview _HU06, 2017). From the point of view of the library services, the books are "out-dated and old" (Key Informant Interview _HU02, 2017). The key informant indicated that there is a lack of access to "new and updated books" and sometimes the university "does not afford to purchase the books" (Key Informant Interview _HU02, 2017). The other problem with respect to the facilities and infrastructure is the lack of "easy access" to the already existing resources emanating from poor administration and management (Key Informant Interview _HU12, 2017). Observations during the interview indicated that most of the laboratory facilities are not accessible due to the poor facility management system emanating from the lack of qualified personnel to work effectively and maintain the facilities. It is not uncommon to see laboratory equipment purchased at an expensive price kept idle forever due to the absence of capable and competent human resources, particularly in the administrative wing which further contributes to the poor and declining quality of education in the university.

Another key informant broadly stated that: "Conducting research and community services requires resources such as vehicle and money and these constraints staff not to engage in outreach and community services and some of these resources are the lack of appropriate and up-to-date facilities such as the library system both for the academic staff and the students" (Key Informant Interview _HU02, 2017). The limitations in terms of infrastructure are not only limited to academic areas but also there is a challenge in the areas of student services such as dormitories. In this regard, although there was an increment in infrastructure in the university in the past, the magnitude currently is limited compared to the student population and as a result the number of students per room in the university residences has increased tremendously from four people per room to up to 26 per room (Key Informant Interview _HU06, 2017).

5.3.1.2(c) Funding challenges

Funding was another sub-theme identified during the interviews by most of the respondents in the university. The socio-economic context of African countries determines the funding level injected into

the higher education sector and to the specific universities. It also differs from university to university and from country to country. A key informant from the institution stated that funding determines the capacity of the university in producing quality research output, purchasing state of the art technologies, establishing laboratory facilities and attracting senior professors who are capable of engaging in the research endeavour of the university (Key Informant Interview _HU03, 2017). There was a strong belief among a few key informants that funding higher learning institutions has declined in terms of the real value over the last decades despite the figure appearing to be increased from time to time. The key informant stated that: “The figure appears to be increasing but I don’t think the real value is increasing due to the exchange rate. Back in old time, 1 dollar approximately equals 2 birr. With exchange rate now raised to [more than] 20[at the time of the interview], with a large number of students we train it doesn’t show much increase in its real term"(Key Informant Interview _HU03, 2017). The other challenge with funding is related to “the scope of academic activity and the funding issue are not compatible and that stresses us a lot"(Key Informant Interview _HU10, 2017). Despite the limited scope in terms of kinds of projects funded in the process, there are positive developments in terms of funding research by the government which was not happening four or five years ago (Key Informant Interview _HU11, 2017).

5.3.1.2(d) Research intensification

One of the key informants from HU highlighted that in the broadest sense, one of the key challenges facing the institution is indeed related to research (Key Informant Interview _HU12, 2017).

5.3.1.2(e) Teaching style and curriculum

In terms of teaching style and curriculum, one of the key informants from HU indicated that “professionally practical study” is lacking in the sphere of the university and most of the higher learning institutions in the country. The key informant further suggested that moving away from theory-focused lecturing to more practical-oriented teaching approaches has to be the way forward stating that: "…moving from memorisation based lecture to professionally practical study is a big challenge. We are trying to push the system for our students to be more practical instead of focusing only on theories"(Key Informant Interview, HU12, 2017).

5.3.1.2(f) Quality of education

Quality of education was also another sub-theme pinpointed during the qualitative study. A key informant from HU clearly stated that “quality of education is declining and deteriorating from time to time"(Key Informant Interview, HU02, 2017). Another key informant from the same institution suggested that the issue of quality of education has to be examined from systems perspectives including input, process, and output. He further mentioned that: “The major challenge … in HE system in

Ethiopia is quality. Maintaining quality of teaching-learning, research and community services are the major challenge. This is because when we say quality, it has many factors: input, process, and output" (Key Informant Interview, HU05, 2017). Additional information from the interview, further explored, indicated that quality of education is indeed one of the contemporary challenges facing the sub-section and the university in particular (Key Informant Interview, HU06&09, 2017), with the informant suggesting that "its sustainability largely depends on the ability of the universities to retain their qualified professors" (Key Informant Interview, HU09, 2017). Another key informant opined that the problem of quality of education is somewhat high in the areas of experimental sciences with the mounting number of enrolments due to the government's attempt to enhance access to higher education (Key Informant Interview, HU11, 2017). Another key informant said they believe that the issue of quality of education is a childbirth of the government plan to expand higher education with the objective of enhancing the higher education access to its citizens in the form of the Growth and Transformation Plan (GTP) driven by the "developmental state paradigm" (Key Informant Interview, HU12, 2017).

5.3.1.2(g) Language policy

Like that of a respondent from AAU, a key informant from HU indicated that lack of language competence is among the bottlenecks facing the sub-sector. The key informant summarised his views in the following way: "… at national level language is a problem. English is the working language in universities but lots of students don't have adequate preparation in terms of language. The language policy is a problem and it is a very complicated issue. The students could be clever but they don't have the language to express their ideas. The students need to learn the language not only the content" (Key Informant Interview, HU12, 2017).

5.3.1.2(h) Massification

Massification of tertiary education has been at the center of strategy and policy discourse in Ethiopia over the last two decades with the prime goal of supporting the development agenda of the country through the provision of sufficient access and equity to all the citizens. In the same line of argument, HU has expanded its capacity over the period of time in terms of facilities, number of students, staff, and others. In this regard, a key informant from the university stated that massification results in the: "…. Physical expansion and increased number of students having implication on the quality of human resources that we are producing and it also affects the delivery mechanisms because we teach a large class size and we lack sufficient facilities such as laboratories"(Key Informant Interview, HU03, 2017). Another key informant has also indicated that the phenomenon has serious implications for the academic staff development in the university (Key Informant Interview, HU08, 2017).

5.3.1.2(i) Physical setting or location

Information obtained through the interviews revealed that the physical location acted as a stumbling block in the effort of the university to “attract and retain its retaining qualified and seasoned academics” (hence, natural factors) (Key Informant Interview, HU05&09, 2017). In his informative interview, the respondent summarised that: "… we are comparatively located far away from the metropolitan and if you work here staff don’t have an opportunity for ‘moonlighting’ and sometimes people prefer to be employed in universities that are located at the capital"(Key Informant Interview, HU09, 2017). Another key informant further noted that: “In some cases, security could be a challenge. Now the third generation universities are located in very remote places in which there is no infrastructure development and no basic infrastructure and staff do not want to work in those universities that are located in remote areas"(Key Informant Interview, HU05, 2017).

5.3.1.2(j) Leadership and governance

Leadership was identified as one of the key challenges limiting the performance of the university. One of the key informants questioned the way the system of higher education in the country was led and the government’s role. He argued that higher education should be managed separately and it has to be independent of the Ministry of Education in the form of agency. The key informant described his views as follows: "One of the challenges is that I feel, the Higher Education Institutions (HEIs) are placed inappropriately structurally. … The HEIs should be managed separately and given a separate agency. HLIs are managed like other education (general). The challenge is organisation itself” (Key Informant Interview, HU13, 2017). The key informant further described what an ideal university structure should look like in Ethiopia: “Universities should be given proper attention by having a separate structure, by having a separate ministry that focuses on the proper management of the universities. They have to be managed by qualified personnel who know the status of universities and who can [effectively] lead universities towards a certain direction. But this time I don’t’ feel it is organised this way"(Key Informant Interview, HU13, 2017).

The other key issue raised in this respect was institutional autonomy. A key informant from HU argued that public universities in Ethiopia are not autonomous and their management should be politicised (Key Informant Interview, HU08, 2017). The same key informant summarised his views as follows: “The ways universities are managed these days is less autonomous…universities have no full autonomy and I don’t think they can change. In the past, universities were relatively autonomous but these days it is completely different because universities are not autonomous and management is politicised. They cannot hire highly qualified professors by themselves and they cannot remunerate those who outperform in the job" (Key Informant Interview, HU08, 2017).

Yet another key informant from the same institution pronounced that “Academic freedom is declining from time to time- there is unnecessary intervention"(Key Informant Interview, HU07, 2017). In addition, the challenge exists with respect to the leadership and governance of the higher learning institutions associated with the emergence of the New Public Management (NPM) model and with the subsequent emergence, insurgency and prevalence of ‘managerialism’ or ‘executive’ approach to governance system over the ‘collegial’ model. In this respect, the key informant meticulously described that: "The emergence of executive or business model type of higher education management over the classical collegial approach to leadership is posing another challenge. If I have to choose between the two approaches, I will go for the collegial approach as the enterprise model or type of governance is consuming much of our time as it involves lots of paperwork and planning issues with many numbers of meeting sessions” (Key Informant Interview, HU01, 2017).

The other key challenge with respect to the higher education governance system is the lack of engagement of the higher education leaders in the strategic issues. They are found to be involved in very routine activities which can be decentralised to be done at department or college level. One key informant, who is holding a deanship position, stated that he spent much of his time on administrative work (especially related to student services) compared to the core missions of the university that required his attention. He summarised his views as follows: "This is my everyday cry and actually, I was crying to top management. What is mostly consuming my time is not the teaching-learning, research and community engagement activities rather it is the administrative activities ranging from maintenance to student services"(Key Informant Interview, HU01, 2017).

5.3.2. State and challenges of higher education in South Africa: The case study of UKZN in South Africa

Information obtained via face-to-face interviews with six key informants from UKZN revealed some of the key challenges facing South African higher learning institutions in general and UKZN in particular. These are human resources management-related challenges, resources, and infrastructure, funding-related challenges, research intensification, quality of education and access to higher education. These sub-themes are each dealt with in the following paragraphs.

5.3.2.1.Human resources management-related challenges

Information generated through the interviews showed that human resources-related issues are some of the key challenges facing UKZN. The first key challenge was related to ‘salary’. Similar to the two Ethiopian universities, some of the key informants from UKZN opined that the salary scale is low compared to what the industry pays in the country. A key informant stated that "The salary scale is too low compared to other sectors such as industries"(Key Informant Interview, UKZN04, 2017).

The second key challenge related to HRM in the context of UKZN was ‘staff development’. A key informant from the institution suggested well-deserved attention was required for staff training and development, highlighting that: "Training and development- need to be taken seriously as a means to overcome the challenge of integration in addition to personal self-development of the lecturers. More creative and innovative ways of doing things need to be adopted. More attention needs to be given to teachers both at lower band and higher band. For instance, teachers are the highest paid in Germany and the ministry in Germany believed that teachers should be paid high because they are the one who is producing engineers and doctors"(Key Informant Interview, UKZN02, 2017). As opposed to the two universities in Ethiopia, the staff profile of UKZN is in a better position. For instance, the proportion of PhD holders out of the aggregate number of academic staff stands tall at 50% in 2016 (UKZN, 2016). This figure shows tremendous improvement compared to the figure in 2004 which indicated that the percentage of PhD holders stands at 35% (UKZN, 2016).

5.3.2.2. Resources and infrastructure

Many of the challenges related to resources and infrastructure were not raised at UKZN compared to those of AAU and HU where such subjects were critically and frequently raised by the key informants. However, one of the key informants mentioned that there is a challenge in terms of integrating technology into the curriculum which is vital in the competitive world of the higher education sector. The key informant stated that: "Technology is becoming a key component for becoming competitive and our universities are not integrating into our curriculum"(Key Informant Interview, UKZN02, 2017).

5.3.2.3.Funding challenges

At UKZN, the lack of sufficient financial resources that commensurate with the massification of higher education was cited among the main bottlenecks encountered by UKZN in particular and the South African higher learning institutions platform in general. One of the interview participants stated that: "The massification of higher education and the lack of sufficient financial resources is another challenge. How do we meet massification and at the same time ensure good quality HE within the financial constraint that we have in the country is the question? And that is not easy to sort out" (Key Informant Interview, UKZN01, 2017). Another key informant from the same university added that the current atmosphere raised by students’ government in higher education in relation to “Fees Must Fall” and the quest for “Free Education” is illustrative of the eminent challenges in relation to funding tertiary education in South Africa. The key informant stated that: "Clearly highlighted by the current atmosphere raised by student government in higher education – ‘fees must fall’ and ‘free higher education’ especially in relation to student funding- there is no much funding to finance student fees.

Young and youth are unemployed and everyone wants to enter universities and there is a challenge in having access to higher education- student funding"(Key Informant Interview, UKZN04, 2017).

5.3.2.4.Research intensification

One of the key informants from the institution indicated that there is a tendency of 'reduced research engagement' (Key Informant Interview, UKZN01, 2017).

5.3.2.5.Teaching style and curriculum

Findings from the interview generally revealed that universities are rarely meeting the demands of the larger society through their teaching and curriculum design and implementation. In this respect, two of the key informants from the institution emphasised that, in most of the South African universities, including UKZN, there is a lack of congruence between what the universities are producing and what the labour market needs most or can absorb.. The key informant summarised his view, presented in the following paragraph:

"Employment situation is a problem - the lack of matching or lack of congruence or lack of interplay between what the universities are producing and what the labour market needs- and it all emanates from the supply chain (starting from primary education) - the university is producing something that the labour market is not appreciating and in a way it is putting a fire to an oil of unemployment- universities are accelerating unemployment. Higher education supply chain management should be the way forward in an attempt to create entrepreneurial universities in an attempt to equip the graduates for the 4th industrial revolution"(Key Informant Interview, UKZN04, 2017). Another key informant also emphasised the lack of integration of technology for the effective implementation of the curriculum (Key Informant Interview, UKZN02, 2017). The key informant further indicated that "the ways our students are taught rarely prepare them to become entrepreneurs and to face the future challenges of the labour markets" (Key Informant Interview, UKZN02, 2017). Despite the fact that some positive initiatives are being taken in the new strategic planning to align the curriculum with the job demands and markets through the engagement of all the stakeholders, the alignment so far has not taken good shape in terms of meeting the market needs (Key Informant Interview, UKZN05, 2017). The key informant further elaborated that: "We need a long-term sustainable kind of project and activities that change the livelihood of the community. We need a long-term sustainable kind of engagement with the community that shows impacts on the life of the society. That is one of the things that need to be reconsidered and looked at to improve and enhance in the future" (Key Informant Interview, UKZN05, 2017).

5.3.2.6.Quality of education

The subject of quality of education was raised by two key informants at UKZN. One of the interview participants stated that "Quality of education- is deteriorating" (Key Informant Interview, UKZN04, 2017). Another key informant aired concern about the possibility of ensuring quality to the mass within the existing financial and resources constrained higher education context, raising a question: "How do we address massive and good quality higher education within the financial constraint that we have in the country is the question? And that is not easy to sort out?" (Key Informant Interview, UKZN01, 2017).

5.3.2.7.The educational system and standardisation

The challenge in relation to the education system was raised at UKZN with a relatively differing perspective compared to the two Ethiopian universities. One of the key informants opined that the "sentiment towards university or professional degree by the mass" need to change mentioning that: "… In any healthy system of higher education, not everyone should be seeing the university as the kind of level of Higher education they need to attain. If you look at the system, for example in Germany, they tell you that very few students go to university and the majority of them go to vocational training so you train to become architects and technicians. And lots of them in the economy and very few with university qualifications in the economy and as a result, the economy is very successful because it's kind of driven by the needs of services and so forth. Whereas in South Africa what we tend to find is everyone believes that they should be going to university and the only type they can have good living in the job is if they have a profession (degree profession) but what the country truly needs is more of architects and technicians" (Key Informant Interview, UKZN01, 2017). The key informant further argued that "there is a mismatch between what the university can accommodate and the demand for higher education by the citizen"; and that: "Given the same infrastructure and capacity, the system is taking many more students"(Key Informant Interview, UKZN01, 2017).

Another key informant opined that the changing nature and context of work in the years to come was not adequately sensed by the students or the university system. The key informant, a prominent academic, researcher, and academic leader argued that the current teaching-learning system taking place in the university rarely prepares students for the future. In her own words, the key informant detailed that: "Students are in the old mindset of enrolling in universities and getting degrees. Routine jobs are going to be taken by robots and we need to think of how we can equip our students with medium to top level skills that makes them cope with this new environment and conditions. I think education across the world needs to change. Every country has their own specific challenges. We don't really look at the impact of what we are teaching. We need to really sit down and think about what we

are teaching and how we are teaching to prepare our students for the future"(Key Informant Interview, UKZN02, 2017).

5.3.2.8.Leadership and governance

At UKZN, the issue of leadership and governance was seen from the perspective of "people management" by emphasising the "lack of interconnectedness among academics/researchers" and the fact that "academics prefer to work in Silos instead of interdisciplinary engagement" (Key Informant Interview, UKZN05, 2017). The key informant elaborated that: "Much academic staff in the university prefers to work in silos and so the interdisciplinary engagement kind of engagement whether in terms of research or teaching that bridges between the different disciplines and connection is not there. That also can contribute to the outcome of the graduates and advancement of research. Because research is interlinked to each other and once you lose that inter-linkage whether in terms of the competitiveness of the graduates and the quality of research and engagement in general between staff members as a higher education community – i.e., small community" (Key Informant Interview, UKZN05, 2017). The key informant further noted that "managing people and getting the harmony of the people working together" was among the key challenges encountering the higher education sub-sector (Key Informant Interview, UKZN05, 2017). The other leadership and governance issue was associated with the execution of the third mission of the university (i.e. community engagement or services) as stated herewith: "The other challenge is engagement with the external community- what is the contribution of the higher education to the people who are left outside. Most of these activities are focused on the marketing aspect that bringing about the real change in the life of the society. What is the positive impact of the university on the poor community? How do we help them? We need a long-term sustainable kind of project and activities that change the livelihood of the community. We need a long-term sustainable kind of engagement with the community that shows impacts on the life of the society. That is one of the things that need to be reconsidered and looked at to improve and enhance in the future" (Key Informant Interview, UKZN05, 2017).

5.3.2.9.Access

Ensuring access to tertiary education for their citizens has been at the top of the agenda of many African and global leaders. In particular, Africa is currently under immense pressure to meet the exceedingly high demand for advanced education within a resource-constrained higher learning institutions landscape. The issue of access to tertiary education has been in the sphere of public debate for quite couple of years in South Africa as well as at UKZN which gave birth to the "Fees Must Fall" movement" which later developed into a "Free education" movement. This exemplifies that access is among the major challenges encountering the South African higher education. In the same way, information obtained through a key informant interview at UKZN indicated that "I think the biggest

challenge we have in South Africa is 'access' given the history of the country. Because of 'injustice' of the past, the families of those who are vulnerable have no financial resources to have access to the higher education" (Key Informant Interview, UKZN01, 2017).

5.3.3. Comparative analysis of the state and challenges of higher education in SSA: The cases of Ethiopian and South African universities

A qualitative analysis of the context of the three universities in the SSA, namely AAU (Ethiopia), HU (Ethiopia), and UKZN (South Africa) revealed that there are common trends across the three universities such as HRM-related challenges (e.g. the existence of low salary scale, retention, etc.), resources and infrastructure, funding, research intensification, teaching style and curriculum, quality of education and governance and leadership. However, there are particular challenges facing Ethiopian universities and South African universities separately. For instance, the language policy and English as a language of training and the competence of the pupils was indicated as one of the key challenges facing the two Ethiopian universities. This issue deserves the attention of advanced education leaders and policymakers. In addition, access to tertiary education was among the main challenges facing the South African higher education landscape. The physical location was particular to Haramaya University only.

5.4. A COMPARATIVE ANALYSIS OF ACADEMIC STAFF PROPENSITY TO DEPART FROM THE THREE UNIVERSITIES

After checking for the reliability of the construct, academic staff propensity to stay or leave across the three universities which was provided to have a Cronbach's coefficient of .893 measured using six items, a comparison was made across the three universities to examine if there is any difference among the faculty members regarding their perceptions of their propensity to depart from the university in the coming days. A one-sample t-test was employed to compare the average values of academic staff's propensity to either stay or depart across the three universities (See Table 5.1).

Table 5.1: One-sample t-test comparing academic staff propensity to stay or leave, across the three universities

Item	M	SD	t	df	Sig. (2-tailed)
UKZN	3.3787	.92078	4.598	124	.000
AAU	3.3621	.99757	5.887	262	.000
HU	2.8083	.95514	-2.894	207	.004

Source: Primary data (Survey, 2017).

Table 5.1 clearly shows that there is significant agreement that: employees at UKZN desire and intend to stay (M=3.37, SD = .92078), t (124) = 4.598, p<.0005; employees at AAU desire and intend to stay in the same way (M=3.36, SD=.99757; t (262) =5.887, p<.0005. However, there is significant disagreement that employees at HU desire and intend to stay (M=2.80; SD=.99757, t (207) =-2.894,

p=0.004. Further analysis using a one-way ANOVA revealed that there is a significant variation in the academic staffs' perceptions of their propensity to stay or leave across the three universities (see Table 5.2). The results of the analysis show that academic staff's propensity to stay or leave differs significantly across the institutions, F (2, 593) = 22.638, p<.0005. Employees at UKZN and AAU indicate more agreement than those at HU that they intend to remain in their jobs. The result also implies that academic staff members at Haramaya University are susceptible to departure from the institution compared to the other two universities (Addis Ababa University and University of KwaZulu-Natal).

Table 5.2: ANOVA result showing variations in academic staff propensity to stay at or leave the three universities

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	42.352	2	21.176	22.638	.000
Within Groups	554.705	593	.935		
Total	597.058	595			

Source: Primary data (Survey, 2017)

5.5. A COMPARATIVE PERSPECTIVE OF THE EFFECT OF DEMOGRAPHIC FACTORS ON ACADEMIC PROPENSITY TO STAY OR LEAVE AT THREE UNIVERSITIES

The effect of selected demographic factors (e.g. age, experience, level of education, academic position, status of employment, family status, condition of income and fields of specialisation) on academic staff propensity to depart at the three universities were analysed using ANOVA. The hypothesis was set based on the review of the literature and the extent of the influence was examined using the ANOVA and described as follows.

5.5.1 Comparative perspective of the influence of age on academic staff propensity to stay at or leave the three universities

Table 5.3: ANOVA result showing the effect of age differences on academic staff propensity to stay at or leave UKZN, AAU, and HU

Universities		Sum of Squares	df	Mean Square	F	Sig.
UKZN	Between Groups	3.938	4	.985	1.217	.307
	Within Groups	96.262	119	.809		
	Total	100.200	123			
AAU	Between Groups	18.475	4	4.619	4.919	.001
	Within Groups	242.255	258	.939		
	Total	260.730	262			
HU	Between Groups	11.344	4	2.836	3.243	.013
	Within Groups	177.499	203	.874		
	Total	188.843	207			

Source: Primary data (2017)

As shown in Table 5.3, a one-way ANOVA was conducted to explore the effect of age on academic staff's propensity to depart from the three institutions. Participants were divided into five categories according to their age: Group 1: Younger than 30 years; Group 2: 30 to 39 years; Group 3: 40 to 49 years; Group 4: 50 to 59 years; Group 5: 60 years and older. At UKZN, there was no statistically significant difference between the age groups (P = 0.307). A similar analysis of the group was made at AAU and the result shows that there was a statistically significant difference ($p < .05$) in the propensity to depart for the five age categories: $F (4, 258) = 4.919$, $p = .001$. At this level, age accounts for 7.1% ($R^2 = 0.071$) of the variance in the intention to either remain at or depart from the institution. Post-hoc test using Tukey HSD shows that the average score for the 60+ years age category (M = 4.0417, SD = .669887) was significantly different from the 40-49 years age group (M = 3.2019, SD = 0.94413), 30-39 years age group (M = 2.6723, SD = 0.91852) and the younger than 30 years age group (M = 3.4462, SD = .97722). The 50-59 years age group (M = 3.5530, SD = .99757) did not significantly differ from either of the other groups. This result implies that older academics are not as comfortable with changing jobs as those who are younger. In a similar fashion, the age group variable was tested to examine its effect on the propensity of scholarly staff to either remain at, or depart from HU and it was found that there was a statistically significant difference ($p < .05$) in the propensity of scholarly staff to depart for the five age categories: $F (4, 258) = 4.919$, $p = .013$. The effect size was medium (partial eta = .060). A post-hoc test revealed that the average score for the 60+ years age group (M = 4.0417, SD = .669887) was significantly different from the 30-39 years age category (M = 2.6723, SD = 0.91852). The younger than 30 years (M = 2.7855, SD = .95340), 40-49 years (M = 3.0435, SD = 1.00531) and 50-59 years (M = 3.5833, SD = .69887) age groups did not significantly differ from any of the other groups. This result reaffirms that the older academic staff members prefer to remain with their institutions while the younger academics are more likely to depart.

5.5.2. A comparative perspective of the effect of tenure on the academic staff propensity to stay at or leave the three universities

Table 5.4: ANOVA result showing the effect of differences of years of experience (tenure) on academic staff propensity to stay at or leave UKZN, AAU, and HU

Universities		Sum of Squares	df	Mean Square	F	Sig.
UKZN	Between Groups	4.832	5	.966	1.192	.317
	Within Groups	94.831	117	.811		
	Total	99.663	122			
AAU	Between Groups	10.258	5	2.052	2.105	.065
	Within Groups	250.472	257	.975		
	Total	260.730	262			
HU	Between Groups	7.326	5	1.465	1.631	.153
	Within Groups	181.517	202	.899		
	Total	188.843	207			

Source: Primary data (2017)

As shown in Table 5.4, a one-way ANOVA was conducted to explore the influence of tenure on the propensity of academic staff to depart from or remain at three institutions, namely UKZN, AAU, and HU. The variable was grouped into six categories: less than 1 year, 1-<6 years, 6-<10 years, 10-<15 years, 15-<20 years and 20+ years against the dependent variable. When compared across the three universities at $p < .05$, it was found that tenure was not a significant predictor of academic staff's turnover intentions (See Table 5.4).

5.5.3. A comparative perspective of the effect of educational qualifications on the academic staff propensity to stay at or leave the three universities

Table 5.5: ANOVA result showing the effect of differences in educational level on academic staff propensity to stay at or leave UKZN, AAU, and HU

Universities		Sum of Squares	df	Mean Square	F	Sig.
UKZN	Between Groups	2.334	3	.778	.954	.417
	Within Groups	97.866	120	.816		
	Total	100.200	123			
AAU	Between Groups	9.622	4	2.405	2.471	.045
	Within Groups	251.108	258	.973		
	Total	260.730	262			
HU	Between Groups	13.100	4	3.275	3.783	.005
	Within Groups	175.744	203	.866		
	Total	188.843	207			

Source: Primary data (2017)

As shown in Table 5.5, a one-way ANOVA was conducted to explore the effect of educational qualifications on academic staff's turnover intentions at three universities, namely UKZN, AAU, and HU. The variable was grouped into five categories: bachelor's degree, master's degree, doctorate, post-doctoral degree and others for the three universities against the dependent variable (intention to either remain at or depart from, the university), which was measured using six-point Likert scale items. When compared across the three universities, it was proved that only two universities (AAU and HU) were found to be statistically significant ($p < .05$) in the intentions to remain for the five categories: $F(4,258) = 2.471$, $P = .045$ and $F(4,203) = 3.783$, $p = .005$ respectively. A post-hoc test indicated that the mean score for the Doctorate group ($M = 3.6105$, $SD = .98915$) significantly differed from the bachelor's group ($M = 3.1212$, $SD = 1.07297$), the master's group ($M = 3.2869$, $SD = 1.00063$) and others ($M = 2.6944$, $SD = .97420$) at AAU. Using the same test it was seen that the mean score for the bachelor's group ($M = 3.0992$, $SD = .92251$) and doctorates ($M = 3.1086$, $SD = .98791$) was significantly different from master's degree holders ($M = 2.6253$, $SD = .91715$) at HU. Qualification did not significantly predict the academic staff propensity to either remain at or depart from UKZN (see Table 5.5).

5.5.4. A comparative perspective of the effect of academic rank on academic staff propensity to stay at or leave the three universities

Table 5.6: ANOVA result showing the effect of differences in academic rank on academic staff propensity to stay at or leave UKZN, AAU, and HU

Universities		Sum of Squares	df	Mean Square	F	Sig.
UKZN	Between Groups	5.171	5	1.034	1.284	.275
	Within Groups	95.029	118	.805		
	Total	100.200	123			
AAU	Between Groups	5.588	5	1.118	1.126	.347
	Within Groups	255.142	257	.993		
	Total	260.730	262			
HU	Between Groups	13.132	4	3.283	3.793	.005
	Within Groups	175.711	203	.866		
	Total	188.843	207			

Source: Primary data (2017)

As shown in Table 5.6, a one-way ANOVA was conducted to explore the effect of educational qualifications on academic staff's turnover intentions at three universities, namely UKZN, AAU, and HU. The variable was grouped into six groupings: full professor, associate professor, senior lecturer/assistant professor, lecturer, junior/developmental/assistant lecturer and others and was tested against the dependent variable (either remain at or depart from, the university), which was measured using six-point Likert scale items. When compared across the three universities it was proved that academic rank is a significant predictor of academic staff's turnover intentions only for HU at ($p < .05$) for the five categories: $F(4,203) = 3.793$, $p = .005$. A post-hoc test indicated that the average score for associate professors ($M = 3.4792$, $SD = .60515$) was significantly different from senior lecturer/assistant professor ($M = 2.6701$, $SD = .97955$) and lecturer ($M = 2.6696$, $SD = .93892$). Academic rank was not a significant predictor of turnover intentions at the other two universities (see Table 5.6).

5.5.5. A comparative perspective of the effect of employment status on the academic staff propensity to stay at or leave the three universities

Table 5.7: ANOVA result showing the effect of differences in employment status on academic staff propensity to stay at or leave UKZN, AAU, and HU

Universities		Sum of Squares	df	Mean Square	F	Sig.
UKZN	Between Groups	1.836	2	.918	1.113	.332
	Within Groups	96.530	117	.825		
	Total	98.367	119			
AAU	Between Groups	7.296	2	3.648	3.716	.026
	Within Groups	253.284	258	.982		
	Total	260.580	260			
HU	Between Groups	1.905	2	.953	1.058	.349
	Within Groups	183.652	204	.900		
	Total	185.557	206			

Source: Primary data (2017)

As shown in Table 5.7, a one-way ANOVA was conducted to examine the effect of employment status on the propensity of academic staff to either remain at or depart from the three universities, namely UKZN, AAU, and HU. The variable was grouped into three categories: Temporary, Permanent and Difficult to Define against the dependent variable (intention to either remain at or depart from, the university) and was measured using six-point Likert scale items. When compared across the three universities it was proved that academic rank is a significant predictor of academic staff's turnover intentions only for AAU at ($p < .05$) for the three categories: $F(2,258) = 3.716$, $p = .026$. The effect size was small (partial eta = .028), indicating that employment status explains 2.8% of the variance in the academic staff's intention to remain or depart. A post-hoc test showed that the average score of those 'difficult to define' their employment status ($M = 3.7639$, $SD = .47915$) differed significantly from those whose employment status was temporary ($M = 2.6667$, $SD = .92195$). The intention to remain or depart for those employees whose employment status was 'difficult to define' was significantly greater than those academic staff members whose employment status was temporary. In the other two universities, employment status was not a significant predictor of turnover intentions (see Table 5.7).

5.5. 6. A comparative perspective of the effect of marital status on academic staff propensity to stay at or leave the three universities

Table 5.8: ANOVA result showing the effect of differences in marital status on academic staff propensity to stay at or leave UKZN, AAU, and HU

Universities		Sum of Squares	df	Mean Square	F	Sig.
UKZN	Between Groups	1.689	3	.563	.686	.562
	Within Groups	98.511	120	.821		
	Total	100.200	123			
AAU	Between Groups	5.835	2	2.917	2.968	.053
	Within Groups	254.615	259	.983		
	Total	260.449	261			
HU	Between Groups	7.117	3	2.372	2.663	.049
	Within Groups	181.726	204	.891		
	Total	188.843	207			

Source: Primary data (2017)

As shown in Table 5.8, a one-way ANOVA was conducted to explore the effect of marital status on academic staff's intention to either remain at or depart from, three universities, namely UKZN, AAU, and HU. The variable was grouped into four categories: single, married, widowed and divorced against the dependent variable (intentions to either remain at or depart from, the university), which was measured using six-point Likert scale items. When compared across the three universities at $p < .05$, it was proved that marital status is a significant predictor of academic staff propensity to depart or remain only for HU for the four categories: $F(3,204) = 2.663$, $p = .049$. The effect size was close to medium (partial eta = .038), indicating that marital status explains 3.8% ($R^2 = .038$) of the variance in the academic staff's intentions to remain at HU. Although it was not possible to undertake a post-hoc test for comparing the means scores using the Tukey HSD test due to the fact that two of the groups, namely divorced and widowed, each had fewer than two cases making it difficult to determine the standard deviation (SD), which is an important input for undertaking the post-hoc test. Despite looking at the mean scores of both married (M = 2.9542, SD = .96342) and single (M = 2.6250, SD = .92084) groups, it is apparent that the intention to remain at the university was significantly greater for married academic staff than for those staff members who are single. At the other two universities, family status did not significantly predict turnover intentions (see Table 5.8).

5.5. 7. A comparative perspective of the effect of income level on the academic staff propensity to stay at or leave the three universities

Table 5.9: ANOVA result showing the effect of differences in income level on academic staff propensity to stay at or leave UKZN, AAU, and HU

Universities		Sum of Squares	df	Mean Square	F	Sig.
UKZN	Between Groups	4.443	5	.889	1.051	.392
	Within Groups	93.026	110	.846		
	Total	97.468	115			
AAU	Between Groups	4.993	5	.999	1.001	.418
	Within Groups	255.456	256	.998		
	Total	260.449	261			
HU	Between Groups	1.529	2	.764	.836	.435
	Within Groups	187.315	205	.914		
	Total	188.843	207			

Source: Primary data (2017)

As shown in Table 5.9, a one-way ANOVA was conducted to examine the effect of income level on scholarly staff propensity to either depart from or remain at three institutions, namely UKZN, AAU, and HU. The variable was grouped into five categories: up to R6745, R 6746-R13, 490, R13, 941-R20, 230, R20, 231-R26, 980, R26, 981-R33, 730 and above R33, 730 against the dependent variable. When compared across the three universities at $p < .05$, it was found that income level did not significantly predict academic staff intentions to depart (See Table 5.9).

5.5.8. A comparative perspective of the effect of areas of specialisation on the academic staff propensity to stay at or leave the three universities

Table 5.10: ANOVA result showing the effect of differences of areas of specialisation on academic staff propensity to stay at or leave UKZN, AAU, and HU

Universities		Sum of Squares	df	Mean Square	F	Sig.
UKZN	Between Groups	2.503	4	.626	.762	.552
	Within Groups	97.697	119	.821		
	Total	100.200	123			
AAU	Between Groups	5.009	4	1.252	1.263	.285
	Within Groups	255.721	258	.991		
	Total	260.730	262			
HU	Between Groups	16.750	4	4.187	4.940	.001
	Within Groups	172.093	203	.848		
	Total	188.843	207			

Source: Primary data (2017)

As shown in Table 5.10, a one-way ANOVA was conducted to examine the effect of area of specialisation on scholarly staff propensity to either depart from or remain at, three institutions namely UKZN, AAU, and HU. The variable was grouped into five categories: Sciences, Technology and

Engineering, Business and Economics, Health and Medical Sciences, Social Sciences and Humanities and other against the dependent variable, and was measured using six-point Likert scale items. When compared across the three universities at $p < .05$, it was proved that area of specialisation is a significant predictor of academic staff's turnover intentions only for HU for the five categories: $F(4,203) = 4.940$, $p = .001$. The effect size was medium (partial eta = .089) indicating that area of specialisation explains 8.9% ($R^2 = .089$) of the variance in the academic staff members' intentions to either remain at or depart from, HU. A post-hoc test revealed that the average score of Sciences, Technology, and Engineering ($M = 3.1350$, $SD = .95968$) statistically and significantly differs from faculty members at Business and Economics ($M = 2.4063$, $SD = .93989$) and Health and Medical Sciences ($M = 2.5111$, $SD = 1.09766$). The intention to remain or depart for Sciences, Technology, and Engineering faculty members was thus significantly greater than those of Business and Economics and Health and Medical Sciences. Area of specialisation did not significantly predict turnover intentions at either UKZN or AAU (see Table 5.10).

5.6. A COMPARATIVE ANALYSIS OF THE EFFECTS OF ORGANISATIONAL FACTORS ON THE ACADEMIC STAFF PROPENSITY TO LEAVE ACROSS THE THREE UNIVERSITIES: MODELLING USING STRUCTURAL EQUATION MODELLING

Investigating the effect of certain antecedents to academic staff propensity to leave can be conducted using inferential statistics such as bivariate correlations, standard multiple regression, and finally structural equation modelling. However, before engaging in such exercises it is necessary to conduct item analysis and that can be done through the examination of the reliability analysis for all the items, using in the questionnaires for both dependent and independent variables. The next part summarises the reliability analysis results for all the constructs.

5.6.1. Reliability analysis

In order to move forward for analysis, it was necessary to perform an item analysis of the measurement scale to ensure the internal reliability of the scales. To this end, Cronbach's alpha coefficient was used to test whether the items consistently measured the same construct and could be combined to give a reliable measure for each of the constructs (refer to Table 5.11). Accordingly, the Cronbach's alpha value was determined to be greater than 0.7 for all the constructs, which is an acceptable threshold in the majority of the literature (Samuel, 2017).

Table 5.11: Summary of the reliability statistics for all the constructs

Constructs	Cronbach's Alpha			N of Items
	UKZN	AAU	HU	
Quality of work life (QWL)	.8570	0.836	.8750	13
Organisational justice (OJ)	0.951	0.945	0.939	19
Job satisfaction (JS)	0.886	0.900	0.902	13
Leader-subordinate relationship (LMX)	0.959	0.937	0.930	7
Rewards and benefits (R&B)	0.883	0.847	0.885	6
Organisational citizenship behaviours (OCB)	0.887	0.860	0.891	16
Turnover intentions (TIs) scale	0.882	0.916	0.850	6

Source: Researcher's compilation

5.6.2 Exploratory factor analysis (EFA)

The questionnaire contained a total of 80 variables (of which 74 measured the predictor variables whereas the other 6 variables were intended to measure the outcome variable). The measurement variables in the questionnaire were constructed depending on the review of literature and thus 13,19,13,7,6, 16, and 6 of them were intended to measure the QWL, OJ, JS, LMX, R&B, OCB and turnover intentions respectively. In order to conduct further analysis, it was imperative to conduct EFA with an overriding goal to "evaluate the dimensionality of a set of multiple indicators (e.g., items from a questionnaire) by uncovering the smallest number of interpretable factors needed to explain the correlations among them" (Brown, 2006, p.20). In addition, the aim of EFA was "to explore the factor structure of the underlying variables to identify the dimensionality of items and to drop items that have low factor loadings as well as redundant items" from the analysis. There are three key steps in conducting EFA. The first step involves assessing the suitability of the data for factor analysis. The second step includes extracting the number of factors using principal Axis factoring with Varimax Kaiser Normalization rotation and the third key step is factor loading. After the factor structure has been explored, the next step is to examine the construct validity and reliability using a CFA which is one part of the SEM to test the fitness of the model across the three universities.

5.6.2.1. Assessing the suitability of the data for factor analysis

The initial step involves assessing the appropriateness of the data for factor analysis. Kaiser-Meyer-Olkin (KMO) and the Barlett test of sphericity (BTS) are used for assessing the suitability of the data. KMO and Bartlett's test is conducted in to see the appropriateness of the data. KMO measure sample sufficiency and Bartlett's test of sphericity was conducted to check the appropriateness of data for analysis whereas the Bartlett test of sphericity (BTS) measures the extent to which an adequate correlation exists between items. KMO "between .5 and .7= mediocre; .7-.8= good; .8-.9= great; and >.9=superb" (Field, 2009:649). For the sample to be adequate to extract the factors, the KMO value

should be >.8. However, the Bartlett test of sphericity (BTS) test is significant if the P value is <.05. Accordingly, the following table shows the suitability of the data for analysis across the three universities for all the constructs (AAU, HU, and UKZN).

Table 5.12: KMO and Bartlett's test for the constructs at the three universities

KMO and Bartlett's test for the constructs at the three universities		AAU	HU	UKZN
Kaiser-Meyer-Olkin measure of sampling adequacy.		.909	.889	.878
Bartlett's test of sphericity	Approx. Chi-Square	11261.169	7532.668	4145.121
	Df	1770	1378	703
	Sig.	.000	.000	.000

Source: Primary data (2017)

As shown in the Table 5.12 above, the values of KMO for the three institutions were .909, .889 and 0.878 for AAU, HU, and UKZN respectively. When seen from the perspective of what is suggested by Kaiser (1974), the values lie in the range of between 0.8 and 0.9 and are within the superb category (Field, 2009, p. 649). In a similar manner, the Barletta test of sphericity (BTS) = 11261.169, $p<0.0005$, = 7532.668, $p<0.0005$, and = 4145.121, $p<0.0005$ for AAU, HU and UKZN respectively. The KMO and Bartlett's tests indicated that the data was highly significant and suitable for conducting the factor analysis (see Table 5.12).

5.6.2.2. Factor extraction

A combination of three criteria was applied to arrive at the optimal number of factors to be retained, including eigenvalue, scree test and total percent variance explained. The eigenvalue criteria dictate that those factors with an eigenvalue greater than or equal to 1 should be retained whereas those factors with an eigenvalue less than 1 should be eliminated. Hence, all factors with an eigenvalue greater than 1 were retained. However, this criteria is not always reliable as there are some of the factors which may have an eigenvalue of less than 1 or more than 1 but still relevant or vice versa. In order to overcome such shortcomings, this study employed an alternative criterion, scree test, to define the number of factors. The scree test is another criteria for defining the number of factors by plotting the eigenvalue on the y-axis whereas the number of factors are on the x-axis. The scree plot test "heuristic is to retain all the factors above (i.e. to the left of) the inflection point (i.e. the point where the curve starts to levels off) and eliminate any factor below (i.e. to the right of) the inflection point. Since the curve is not necessarily smooth there can be multiple inflection points and so the actual cut-off point can be subjective". Thus, the decision is made by looking at the point where the slope of the curve is clearly levelling off (the 'elbow') as this indicates the number of factors that should be generated by the analysis. Accordingly, at UKZN, the factors with an eigenvalue > 1 were retained whereas at AAU and HU some of the factors with an eigenvalue > 1 were dropped and alternatively a scree plot test was employed to retain some of the factors and to drop others. Thirdly, the total variance explained by

the factors is another criterion in determining the number of factors. Total percent variance explained is another metric or parameter to keep in mind while determining the number of factors by closely looking at the total percentage of variability explained by each factor solution. Those factors are arranged in the order of the variance they explain and the one with the highest amount of variability are listed on the top whereas those with the lowest amount of variability are listed at the bottom of the list. Thus, for this study, the total variance explained and eigenvalues were computed taking the data from the three universities, AAU, HU, and UKZN, and these are separately displayed in the following consecutive tables (Tables 5.13 to 5.15).

Table 5.13: Total variance explained at UKZN

	Initial eigenvalues			Extraction sums of squared loadings			Rotation sums of squared loadings		
Factor	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	14.594	38.405	38.405	14.305	37.644	37.644	7.521	19.793	19.793
2	3.886	10.226	48.631	3.585	9.433	47.077	5.787	15.228	35.021
3	2.430	6.395	55.026	2.114	5.564	52.641	2.909	7.655	42.676
4	2.196	5.778	60.804	1.829	4.812	57.453	2.657	6.992	49.668
5	1.887	4.966	65.770	1.572	4.137	61.591	2.624	6.906	56.574
6	1.795	4.725	70.495	1.465	3.855	65.445	2.240	5.894	62.468
7	1.379	3.630	74.125	.988	2.601	68.046	2.120	5.578	68.046
8	.936	2.464	76.588						
9	.841	2.213	78.801						
10	.697	1.834	80.635						
11	.653	1.717	82.352						
12	.629	1.654	84.006						
13	.531	1.399	85.405						
14	.479	1.260	86.665						
15	.456	1.200	87.865						
16	.431	1.133	88.998						
17	.391	1.030	90.028						
18	.386	1.015	91.043						
19	.347	.913	91.956						
20	.307	.808	92.764						
21	.286	.752	93.516						
22	.276	.725	94.241						
23	.242	.636	94.877						
24	.228	.600	95.477						
25	.206	.541	96.018						
26	.190	.499	96.518						
27	.175	.461	96.979						
28	.166	.436	97.415						
29	.150	.395	97.810						
30	.147	.386	98.196						
31	.130	.343	98.539						
32	.110	.289	98.828						
33	.102	.269	99.097						
34	.093	.245	99.342						
35	.080	.210	99.551						
36	.071	.187	99.739						
37	.058	.153	99.892						
38	.041	.108	100.000						

Extraction method: Principal axis factoring.

Source: Primary data (2017)

As shown in Table 5.13, the total variance explained by the factors at UKZN was 68.046%. This value was computed based on the proportion of the explained variance for each of the components retained in the factor analysis. For instance, the factors 1, 2, 3,4,5,6 and 7 accounted for 38.405%, 10.226%, 6.395%, 5.778%, 4.966%, 4.725% and 3.630% of the total variance respectively. Thus, the cumulative percentage values of the variance explained by the respective factors (factor 1-7) adds up to 68.046% (see details in Table 5.13) .

Table 5.14: Total variance explained at AAU

	Initial eigenvalues			Extraction sums of squared loadings			Rotation sums of squared loadings		
Factor	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	17.525	29.208	29.208	17.162	28.604	28.604	9.704	16.173	16.173
2	4.630	7.717	36.925	4.274	7.124	35.728	4.641	7.735	23.908
3	4.058	6.763	43.688	3.593	5.989	41.717	4.180	6.966	30.875
4	2.824	4.707	48.395	2.474	4.123	45.840	3.478	5.797	36.672
5	2.568	4.279	52.675	2.182	3.636	49.476	3.271	5.452	42.124
6	2.155	3.591	56.266	1.723	2.872	52.348	2.968	4.947	47.071
7	1.732	2.886	59.152	1.287	2.144	54.493	2.804	4.673	51.744
8	1.622	2.703	61.855	1.253	2.088	56.581	2.327	3.879	55.623
9	1.526	2.543	64.398	1.055	1.758	58.339	1.629	2.715	58.339
10	1.190	1.984	66.382						
11	1.062	1.770	68.152						
12	1.059	1.765	69.916						
13	1.015	1.692	71.608						
14	.835	1.392	73.000						
15	.818	1.364	74.364						
16	.796	1.327	75.692						
17	.747	1.245	76.937						
18	.701	1.169	78.105						
19	.678	1.129	79.235						
20	.641	1.069	80.303						
21	.621	1.034	81.337						
22	.577	.961	82.299						
23	.548	.914	83.213						
24	.533	.888	84.101						
25	.510	.850	84.951						
26	.484	.806	85.757						
27	.464	.774	86.531						
28	.445	.742	87.273						
29	.432	.719	87.993						
30	.423	.705	88.697						
31	.399	.665	89.363						
32	.395	.659	90.022						
33	.383	.638	90.659						
34	.372	.620	91.279						
35	.351	.585	91.864						
36	.326	.543	92.407						
37	.313	.522	92.929						
38	.309	.515	93.444						
39	.296	.493	93.938						
40	.283	.472	94.409						
41	.278	.463	94.872						
42	.273	.454	95.326						

43	.249	.414	95.741
44	.240	.400	96.140
45	.220	.367	96.507
46	.205	.342	96.849
47	.201	.334	97.183
48	.189	.315	97.498
49	.174	.290	97.789
50	.170	.284	98.073
51	.166	.276	98.349
52	.147	.245	98.594
53	.136	.227	98.822
54	.129	.214	99.036
55	.125	.209	99.245
56	.109	.182	99.427
57	.107	.178	99.604
58	.090	.150	99.754
59	.075	.124	99.879
60	.073	.121	100.000

Extraction method: Principal axis factoring.

Source: Primary data (Survey, 2017)

As shown in Table 5.14, the total variance explained by the factors at AAU was 58.339%. This value represents the cumulative percentage of variance of the nine factors identified in the table above with the highest value of 29.208% to the lowest value of 2.543 %(see details in Table 5.14).

Table 5.15: Total variance explained at HU

	Initial eigenvalues			Extraction sums of squared loadings			Rotation sums of squared loadings		
Factor	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	15.418	29.090	29.090	15.026	28.351	28.351	8.876	16.747	16.747
2	4.706	8.879	37.969	4.315	8.141	36.492	4.083	7.703	24.450
3	3.685	6.952	44.922	3.284	6.196	42.688	3.786	7.143	31.593
4	2.583	4.874	49.796	2.176	4.106	46.794	3.755	7.084	38.677
5	2.408	4.543	54.339	2.046	3.859	50.653	3.318	6.260	44.937
6	2.066	3.898	58.237	1.621	3.059	53.712	2.387	4.504	49.441
7	1.572	2.966	61.203	1.181	2.229	55.941	2.332	4.400	53.841
8	1.478	2.788	63.991	1.045	1.971	57.911	2.157	4.071	57.911
9	1.085	2.047	66.038						
10	1.012	1.910	67.948						
11	.976	1.841	69.789						
12	.901	1.700	71.490						
13	.823	1.552	73.042						
14	.797	1.504	74.546						
15	.751	1.417	75.963						
16	.724	1.366	77.329						
17	.683	1.289	78.618						
18	.646	1.220	79.838						
19	.629	1.187	81.025						
20	.610	1.151	82.176						
21	.565	1.067	83.243						
22	.556	1.049	84.292						
23	.530	1.000	85.292						
24	.503	.950	86.242						
25	.474	.894	87.135						
26	.456	.861	87.996						
27	.413	.779	88.775						
28	.403	.760	89.535						
29	.395	.745	90.280						
30	.372	.702	90.982						
31	.362	.683	91.664						
32	.339	.639	92.304						
33	.336	.634	92.938						
34	.321	.606	93.543						
35	.305	.576	94.119						
36	.286	.540	94.659						
37	.280	.529	95.188						
38	.257	.484	95.673						
39	.236	.445	96.118						
40	.226	.426	96.544						
41	.201	.379	96.924						
42	.196	.370	97.294						

43	.187	.353	97.647
44	.170	.321	97.968
45	.158	.298	98.265
46	.151	.285	98.551
47	.143	.271	98.821
48	.135	.254	99.076
49	.121	.228	99.303
50	.104	.197	99.500
51	.101	.191	99.691
52	.094	.177	99.869
53	.070	.131	100.000

Extraction method: Principal axis factoring.

Source: Primary data (2017)

As shown in Table 5.15, the total variance explained by the factors at HU was 57.991%. This value represents the cumulative percentage of the variance explained for the eight factors identified in the table above with highest and lowest values of 29.090% and 2.788 % respectively (see details in Table 5.15). The next section displays the "factor loadings" for each of the factors retained and the respective individual variables within retained under each latent variable.

5.6.2.3. Factor loading

The third key step in the EFA is factor loading. Principal axis factoring with Varimax Kaiser Normalization rotation was used to extract the items per factor across the three universities. The process involved removing both cross-loaders (items or questions that load onto more than one factor with a loading >.4 for both items) and low-loaders (those items or questions that load very low, <.4, onto all factors). The process was repeated until such time that there was no cross-loading or low loading for all the variables in the latent variables. This process continued until all variables had been added and a reasonably clear structure of the data had been established (See Tables 5.16 to 5.18 below for details).

Table 5.16: Factor loadings, exploratory factor analysis: UKZN

Items	Factor						
	OJ_PJ	LMX	TI	QWL_JC	R&B	OJ_DJ	OCB_WPH
OJ_17	.807						
OJ_15	.796						
OJ_19	.788						
OJ_18	.782						
OJ_16	.751						
OJ_14	.740						
OJ_12	.710						
OJ_11	.663						
OJ_8	.662						
OJ_13	.630						
OJ_9	.627						
OJ_7	.561						
LMX_6		.831					
LMX_1		.821					
LMX_5		.793					
LMX_4		.790					
LMX_2		.780					
LMX_3		.772					
LMX_7		.746					
IL_3			-.804				
IL_2			-.797				
IL_4			-.747				
IL_1			-.743				
QWL_12				.780			
QWL_11				.721			
QWL_13				.708			
QWL_10				.618			
R&B_2					.764		
R&B_3					.685		
R&B_5					.683		
R&B_4					.663		
OJ_4						.678	
OJ_2						.652	
OJ_3						.584	
OJ_5						.464	
OCB_11							.823
OCB_15							.744
OCB_12							.736

Extraction method: Principal axis factoring.
Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 7 iterations.

Source: Primary data (2017)

As shown in Table 5.16, 30 of 34 items measuring independent variables and four of them measuring the dependent variable were extracted at UKZN with less than 50% (42.4%) of the total number of items planned to measure both the dependent and independent variables. More specifically, from the 13 items originally developed to measure the QWL constructs, only four items categorised under a single factor were retained at UKZN. The items retained were QWL10-13 whereas items QWL 1-9 were dropped from the analysis. The same procedure was employed for all the sub-constructs including OJ in which case most of the items were grouped under two factors and items such as OJ_1, 6, and 10 were dropped for the same reason mentioned above and OJ_20 was removed from the construct at the onset of the data collection due to erroneous dropping of the item during the duplication of the questionnaires. The JS construct was totally dropped at this stage for UKZN due to cross-loadings and none of them were retained. All the constructs under the LMX construct were retained whereas two items under the R&B construct, items 1 and 6, were dropped from the analysis. Lastly, only three constructs such as item OCB_11, 15 and 12 were retained for the OCB construct whereas the rest of the items in the construct were dropped either due to low loadings or cross-loadings. Furthermore, only four items (3, 2, 4, and 1) were retained for the dependent variable intentions to leave (IL) (Refer to Table 5.16).

The factor loading estimates ranged from 0.561 to 0.807 for procedural justice, 0.746 to 0.831 for leader-subordinate relationships, -0.743 to -0.804 for intentions to stay, 0.618 to 0.780 for the quality of work life, 0.663 to 0.764 for rewards and benefits, and 0.736 to 0.823 for distributive justice (See details in Table 5.16).

Table 5.17: Factor loadings, exploratory factor analysis: AAU

Items	Factor								
	OJ_PJ	LMX	TI	R&B	J&S	OCB_GC	QWL_JC	OCB_A	OJ_DJ
OJ_13	.802								
OJ_12	.798								
OJ_15	.792								
OJ_9	.788								
OJ_16	.782								
OJ_18	.781								
OJ_17	.764								
OJ_7	.759								
OJ_8	.755								
OJ_10	.746								
OJ_19	.722								
OJ_11	.663								
OJ_14	.694								
OJ_6	.578								
LMX_6		.785							
LMX_4		.753							
LMX_5		.735							
LMX_7		.697							
LMX_3		.672							
LMX_2		.641							
LMX_1		.641							
IL_2			-.846						
IL_3			-.811						
IL_1			-.787						
IL_4			-.769						
IL_5			-.707						
IL_6			-.522						
R&B_5				.828					
R&B_6				.796					
R&B_2				.749					
R&B_1				.697					
R&B_4				.641					
R&B_3				.352					
JS_11					.615				
JS_8					.559				
JS_5					.553				
JS_6					.549				
JS_10					.532				
JS_7					.524				
JS_13					.515				
OCB_14						.671			
OCB_13						.649			
OCB_15						.572			
OCB_11						.538			

OCB_12	.516				
OCB_10	.406				
OCB_16	.400				
OCB_9	.395				
OCB_7	.328				
QWL_12		.726			
QWL_11		.700			
QWL_13		.640			
QWL_8		.590			
QWL_10		.577			
OCB_1			.866		
OCB_2			.784		
OCB_3			.663		
OJ_3				.730	
OJ_1				.631	
OJ_5				.521	

Extraction method: Principal axis factoring.
Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 7 iterations.

Source: Primary data (2017)

As shown in the Table 5.17, in the context of AAU, 54 of 60 measuring independent variables and six of them measuring the dependent variable were extracted at AAU with a quarter (75%) of the total number of items planned to measure both the dependent and independent variables being retained and 25% of them being dropped either due to cross-loadings or due to low-loadings onto the factors. The total numbers of factors extracted were nine of which two, namely OJ and OCB each contained two sub-factors. The two sub-factors under OJ were distributive justice (OJ_DJ) and procedural justice (OJ_PJ) respectively. Distributive justice (OJ_DJ) was measured using three items (e.g., OJ_3, 1 and 5) retained during the exploratory factor analysis whereas the second sub-factor, OJ_PJ retained 14 items including OJ_12,12,15,9,16,18,17,7,8,10,19,11,14 and 6. However, a single factor was extracted for the rest of constructs including QWL, JS, LMX, R&B, and IL. The QWL construct retained five items, JS retained seven items, LMX retained seven items, R&B retained six items and finally IL as a dependent variable retained six of its items (See table 5.17).

The factor loading estimates varied between 0.578 and 0.802 for procedural justice, 0.641 to 0.785 for leader-subordinate relationships, -0.522 to -0.846 for intentions to stay, 0.352 to 0.828 for rewards and benefits, 0.513 to 0.613 for job satisfaction, 0.328 to 0.671 for organisational citizenship behaviour (1), 0.577 to 0.726 for quality of work life, 0.663 to 0.866, and 0.521 to 0.730 for distributive justice (See details in Table 5.17).

Table 5.18: Factor loadings, exploratory factor analysis: HU

Items	Factor							
	OJ_ PJ	LMX	R&B	JS	TI	OCB_GC	OCB_A	QWL_JC
OJ_16	.787							
OJ_15	.785							
OJ_8	.774							
OJ_18	.761							
OJ_7	.746							
OJ_13	.745							
OJ_19	.738							
OJ_9	.734							
OJ_12	.731							
OJ_17	.720							
OJ_11	.668							
OJ_6	.646							
OJ_10	.630							
OJ_14	.598							
LMX_5		.772						
LMX_7		.758						
LMX_4		.728						
LMX_6		.690						
LMX_1		.620						
LMX_3		.616						
LMX_2		.595						
R&B_5			.851					
R&B_6			.819					
R&B_4			.704					
R&B_2			.668					
R&B_1			.612					
R&B_3			.597					
JS_7				.678				
JS_11				.649				
JS_6				.627				
JS_10				.611				
JS_8				.540				
JS_13				.513				
JS_5				.507				
JS_9				.497				
IL_2					-.770			
IL_1					-.742			
IL_4					-.716			
IL_3					-.644			
ISL_6					-.528			
ISL_5					-.517			
OCB_14						.639		
OCB_15						.626		
OCB_13						.619		

OCB_11	.617			
OCB_12	.507			
OCB_2		.856		
OCB_1		.796		
OCB_3		.694		
QWL_12				.751
QWL_11				.637
QWL_13				.615
QWL_8				.576
QWL_10				.751

Extraction method: Principal axis factoring.
Rotation Method: Varimax with Kaiser Normalization.
a. Rotation converged in 7 iterations.

Source: Primary data (2017)

As shown in the Table 5.18, in the context of HU, a total of 53 items were extracted using principal axis factoring with Varimax Kaiser Normalization rotation, out of which 47 measured the independent variables whereas six of them measured the dependent variable. The percentage of items retained after extracting the items were about 66.25% compared to the originally hypothesised items for measuring both the independent and dependent variables and slightly more than 30% of them being dropped either due to cross-loadings or low loadings at HU. For the total number of factors, the items were grouped into eight factors of which seven were intended to measure independent variables whereas one of the factors of the eight measured academic staff intention to leave or depart (IL). More specifically, items for all the sub-constructs were grouped under a single factor with the exception of OCB which had two separate factors. The first factor retained three items such as OCB_2, 1, and 3 whereas the second factor contained items such as OCB_14, 15, 13, 11 and 12. However, the rest of the constructs had one factor only. For instance, four items such as QWL_12, 10, 13 and 11 were retained under QWL construct, eight items for JS including JS_7,11,6,10,8,13,5, and 9; LMX retained its seven items such as LMX_5,7,4,6,1,3, and 2; R&B retained six items including R&B_5,6,4,2,1,and 3; and finally the dependent variable, IL, had retained all its items (See table 5.17). The factor loading estimates varied between 0.598 and 0.787 for procedural justice, 0.595 and 0.772 for leader-subordinate relationships, 0.597 and 0.851 for rewards and benefits, 0.497 and 0.678 for job satisfaction, -0.517 and -0.770 for intentions to leave or stay, 0.507 and 0.639 for .751 (See details in Table 5.18).

5.6.2.4. Comparing factor loadings across the three universities

The results of the factor extraction method across the three universities (UKZN, AAU and HU) using principal axis factoring with Varimax Kaiser Normalization extraction revealed that 38, 60, and 54 items were retained for UKZN, AAU, and HU respectively with the numbers correlating with the sample size. The sample size might have a bearing effect in the retention of the items during the extraction with the highest number recorded at AAU which has the highest number of sample size and

number of respondents compared to the other two universities. The other factor that led to the low number of retention of the items during extraction at UKZN might also be attributed to the contextual difference between the universities in the two countries.

Furthermore, the universities also varied in the number of factors extracted with the highest number of factors being recorded at AAU (9) followed by HU (8) and lastly by UKZN (7). Delving into individual constructs and sub-constructs revealed the specific items retained and dropped during the extraction process. For instance, the QWL construct was retained with a varying number and kind of items for the three universities. With the exception of AAU which retained an additional one item (QWL_8), all the three universities retained a similar number and kind of items for QWL. The items retained across the three universities are QWL_12, 11, 13 and 10. In the same manner items across the three universities were compared to see if there are variations in terms of the number of factors and specific items retained at exploratory factor analysis stage for constructs for all the predictor and outcome variables. Accordingly, both the number and kind of items loaded onto the distributive justice dimension of the organisational justice construct (OJ_DJ) varied across the three universities in which case OJ_4, 2, 3 and 5 were retained for UKZN, OJ_3, 1 and 5 were retained for AAU whereas none of the items for this dimension of the construct were loaded for HU. On the contrary, there is a greater similarity on how items were loaded for the procedural justice dimension of the organisational justice construct (DJ_PJ). It is revealed that 12 items were loaded and retained at the three universities. However, both AAU and HU retained an additional two items such as OJ_6 and 10 which makes the total number of items retained to be 14 in total for both universities. When compared for the job satisfaction construct, the items were loaded only for the two Ethiopian universities (AAU and HU) and totally removed from the UKZN data. When compared across the two Ethiopian universities, there is a certain degree of consistency both on the number and kinds of items that were loaded onto the job satisfaction factor (e.g., JS_5, 6, 7, 8, 10, 11, and 13). In addition, JS_9 was loaded onto the job satisfaction factor at HU making the total number of items per factor to be eight. The reason why job satisfaction was totally dropped as a construct at this stage could be attributed to the sample size taken from UKZN compared to the sample sizes taken from the other two Ethiopian universities.

The LMX scales were consistently loaded both in number and kind across the three universities despite there being variation in the loading weights. In the same manner, rewards and benefits were consistently loaded for all the three universities with the exception of UKZN which had only four loadings and two items were dropped after further analysis. The items dropped during the exploratory factor analysis were R&B_ loadings of only four items namely R&B_1 and 6.

For the organisational citizenship behaviour, two factors were identified at the two Ethiopian universities (AAU and HU) and only one factor at UKZN. The first factor (OCB_F1) had three items loaded at the two Ethiopian universities (OCB_1, 2 and 3). On the other hand, the second factor

(OCB_F2) had a varying number of loadings across the three universities with three, nine and five factors being loaded for UKZN, AAU and HU respectively. The factors grouped or categorised under OCB_F2 were OCB_11,12 and 15; OCB_6,7,9,10,11,12,13,14, and 15; and OCB_11,12,13,14 and 15 for UKZN, AAU and HU respectively. Three items were consistently loaded across the three universities, namely OCB_11, 12 and 15. Lastly, four items were consistently loaded at UKZN whereas six of the items were loaded for the IL factor at the two Ethiopian universities (AAU and HU). Comparing the three universities, four of the ISL items, namely ISL_3, 2, 4 and 1, were consistently loaded across the three universities.

5.6.3 Confirmatory factor analysis (CFA)

A CFA was conducted to confirm the reliability of the constructs and the convergent and discriminant validity of the constructs which presupposes the specification of a theoretical model that needs to be confirmed through the confirmatory factor analysis. The CFA used the final item loadings of an EFA for both the dependent and independent variables for testing the hypothesised model. On the basis of this information, the validity and reliability, as well as the fit of the model, were evaluated using criteria adopted from previous studies and literature. The criteria used for evaluating the measurement model were " x^2/dfratio, Normed fit index (NFI), relative fit index (RFI), comparative fit index (CFI), incremental fit index (IFI), root mean-square error of approximation (RMSEA)" (Nusair & Hua, 2010; Schumacker & Lomax, 2010).

After several items were dropped from the respective constructs either due to low loadings or cross-loadings, both reliability and validity were tested and checked for both the predictor as well as the outcome. The summarised form of the reliability and validity of the constructs along with the associated observed variables provided in Tables 5.19 to 5.21.

5.6.3.1. Reliability

Reliability can be defined as " the degree to which the measurements of a particular instrument are free from errors and as a result produce consistent results"(Sreejesh, Mohapatra, & Anusree, 2014; pp. 114-115). Cronbach's alpha value of greater than or equal to 0.70 is an acceptable yardstick for measuring internal consistency of the constructs. Accordingly, the findings have displayed a good internal consistency for all the constructs with greater than or equal to a 0.70 Cronbach's alpha value. Furthermore, the composite reliability (CR) was also above the bare minimum required value of the greater than or equal to 0.70.

5.6.3.2. Validity

In this study, the average variance extracted (AVE) value was adopted to evaluate the convergent validity of the data and it produced AVEs above 0.50, showing that all constructs fulfilled the convergent validity criteria. Furthermore, the discriminant validity is evaluated using the 'rule of thumb' which states that AVE for each construct must be more than the maximum shared variance (MSV). Accordingly, the discriminant validity criteria were fulfilled because each and every construct generated an AVE value that was greater than the MSV (Nair, Yet Mee, & Nai Cheik, 2016) (See Tables 5.19 to5.21 for the details on validity and reliability of the constructs).

Table 5.19: Reliability and validity of constructs for UKZN

Construct	CR	AVE	MSV
Job characteristics and work conditions (QWL_JC)	0.830	0.555	0.251
Distributive justice (OJ_DJ)	0.825	0.548	0.417
Procedural justice (OJ_PJ)	0.954	0.655	0.486
Leader-subordinate relationship (LMX)	0.958	0.767	0.486
Rewards and benefits (R&B)	0.837	0.563	0.417
Workplace harmony (OCB_WPH)	0.837	0.63	0.125
Turnover intentions (TI)	0.898	0.689	0.24

Source: Primary data (2017)

Table 5.20: Reliability and validity of constructs for AAU

Construct	CR	AVE	MSV
Job characteristics and work conditions (QWL_JC)	.811	.519	.310
Distributive justice(OJ_DJ)	.728	.572	.120
Procedural justice (OJ_PJ)	.961	.641	.521
Job satisfaction (JS)	.838	.509	.399
Leadership-subordinate relationship (LMX)	.933	.668	.477
Rewards and benefits (R&B)	.874	.586	.223
General compliance (OCB_GC)	.883	.720	.094
Turnover intentions (TI)	.918	.654	.244

Source: Primary data (2017)

Table 5.21: Reliability and validity of constructs for HU

Construct	CR	AVE	MSV
Job characteristics and work conditions (QWL_JC)	.810	.516	.383
Procedural justice (OJ_PJ)	.949	.570	.453
Job satisfaction (JS)	.812	.521	.38
Leadership-subordinate relationship (LMX)	.929	.654	.453
Rewards and benefits (R&B)	.886	.614	.270
Altruism (OCB_A)	.912	.777	.160
Turnover intentions (TI)	.826	.546	.191

Source: Primary data (2017)

As shown in the Tables 5.18 to 5.20, both validity and reliability requirements were met for all the respective latent variables across the three universities, making the model a candidate for measuring the goodness-of-fit of the model. In essence, the tests passed both reliability and validity for all the latent variables across the three institutions, proving that the data qualified for further analysis which aimed at the assessment of the fit indices for the measurement model. The next sub-section briefly describes the four kinds of fit indices applied to this particular study.

5.6.3.3. Measuring model fit

The fitness of a model can be measured using fit indices. Theoretically speaking, there are three commonly used aggregate types of fit indices in SEM. These are the absolute fit, the incremental fit, and the parsimonious fit (Hooper, Coughlan, & Mullen, 2008; Nair et al., 2016). The overall model fit in both measurement and structural models are evaluated using several goodness-of-fit indices including " x^2/df ratio, Normed fit index(NFI), relative fit index (RFI), comparative fit index (CFI), incremental fit index (IFI), root mean-square error of approximation (RMSEA)" (Nusair & Hua, 2010). However, for this particular study, the researcher employed only four specific fit indices including: χ^2 and χ^2/df ratio, RMSEA Index, CFI and IFI. The reason for this is that they are relatively less sensitive to the sample sizes. The selected fit indices and their cut-off points are summarised in Table 5.22 below.

Table 5.22: Model-fit criteria and acceptable fit interpretations

Model-fit criterion	Acceptable level	Interpretation
Chi-square (χ^2)	Tabled χ^2 value	Compares obtained χ^2 value with tabled value for given *df*
Goodness-of-fit Index (GFI)	0 (no fit) to 1 (perfect fit)	Value close to .90 or .95 reflect a good fit
Root-mean-square error of approximation (RMSEA)	.05 to .08	Value of .05 to .08 indicate close fit
Incremental Fit Index (IFI)	0 (no fit) TO 1(perfect fit)	A value greater than 0.90 is acceptable

Source: Slightly adapted from (Schumacker & Lomax, 2010, p.76)

Based on the fit incidences specified above, the results of the analysis show that the measurement model passed the fit indices for CFA across the three universities, as shown in Table 5.23 below.

Table 5.23: Measurement model fit indices for CFA for the three universities

Fit indices	Fit values			Criteria
	AAU	HU	UKZN	
X^2/df	1.460	2.371	1.577	<5
RMSEA	0.042	0.042	0.068	<0.08
CFI	0.952	0.953	0.910	>0.95
IFI	0.953	0.953	0.912	>0.9

Source: Primary data (2017)

It is clear from Table 5.23 that a few measures were employed to evaluate the adequacy of the model using the fit indices for the three universities. The criteria employed to evaluate the overall fit of the model across the three universities were X2/df, RMSEA, CFI, and IFI. The result shows that the model is fit across the three institutions for the respective variables. Further, Table 5.23 shows that the fit indices for AAU were X^2/df <5, IFI >.9, CFI>.95 and RMSEA <.08, justifying the fitness of the model. In the same manner, the model for HU and UKZN also revealed that they are a good fit for further analysis. Although the CFI value for UKZN (CFI=.910) fell a little short of the suggested benchmark, it is still a reasonable figure to accept the model given the complexity of the model tested and hence it is justifiable to accept the model. The reason for the slight variation could be attributed to the sample size or organisational context arising from the geographical and socio-political and economic context of the institutions, with two located in Ethiopia and one in South Africa. To sum up, the findings reveal that the structural model has a reasonably good fit.

5.6.3.4. Model estimation using standardised regression

Model estimation involves computation of both standardised and unstandardised regression weights (coefficients). The following tables, Table 5.24 to 5.26, show the estimation of the effect of selected organisational practices on the propensity of academic staff to either depart from or remain at the three universities.

Table 5.24: Unstandardised and standardised regression weights (coefficients): UKZN

Paths			Unstandardised regression weights (coefficients)	Standardised regression weights (coefficients)	S.E.	C.R.	P
Turnover Intentions	<--	Procedural Justice (OJ_PJ)	.202	-.293	.100	2.013	.051
Turnover Intentions	<--	Distributive Justice (OJ_DJ)	.209	-.103	.100	2.092	.499
Turnover Intentions	<--	Rewards and Benefits (R&B)	.075	-.304	.096	.781	.020
Turnover Intentions	<--	Workplace Harmony (OCB_WPH)	.250	-.100	.135	1.853	.286
Turnover Intentions	<--	Leader-Subordinate Relationship (LMX)	.281	.121	.144	1.950	.336
Turnover Intentions	<--	Job Characteristics and Work Conditions (QWL_JC)	.223	-.100	.103	2.151	.339

Source: Primary data (2017)

As can be seen in Table 5.24, OJ-PJ explains 29.3% of the variance in the academic staff intentions to leave or depart; OJ-DJ explains 10.3% of the variance in the intentions to depart or leave; R&B also explains 30.4% of the variance in the dependent variable; OCB explains about 10% of the variance in the dependent variables; LMX explains 12.10% of the variance in the dependent variable and lastly QWL explains about 10% of the variance in the dependent variable (i.e. intentions to leave). Among the constructs, only R&B significantly predicted academic staff intentions to depart at UKZN ($\beta = -.304, P = .020$). Hence, pay is one of the key factors that defines academic staff's intention to depart from UKZN.

Table 5.25: Unstandardised and standardised regression weights: AAU

Paths			Unstandardised regression weights (coefficients)	Standardised regression weights (coefficients)	S.E.	C.R.	P
Turnover Intention	<--	Procedural Justice	.202	-.185	.100	2.013	.044
Turnover Intention	<--	Job Characteristics and Work Conditions	.209	-.176	.100	2.092	.036
Turnover Intention	<--	Distributive Justice	.075	-.057	.096	.781	.435
Turnover Intention	<--	Altruism	.250	-.113	.135	1.853	.064
Turnover Intention	<--	Job Satisfaction	.281	-.207	.144	1.950	.051
Turnover Intention	<--	Rewards and Benefits	.223	-.154	.103	2.151	.031
Turnover Intention	<--	Leader-Subordinate Relationship	-.093	.069	.120	-.777	.437

Source: Primary data (2017)

As shown in Table 5.25 above, job characteristics dimensions of QWL_JC, organisational justice dimensions (distributive and procedural), JS, LMX, R&B and altruism dimension of OCB_A predicted academic staff's intent to depart from the institution. However, only three of them were found to be statistically significant to predict the outcome variable (i.e. intentions to leave). These are job-related

characteristics of the (QWL_JC, OJ_PJ and R&B dimensions of the antecedents of academic staff's intention to leave. When compared across the three latent variables which were identified to influence the intentions of the academic staff to depart from their institutions, relatively speaking, procedural justice's influence is higher. For instance, the table shows that an increase in the perception of academic staff on the procedural justice within the university decreases to academic staff intention to leave by 18.5% whereas an increase in the perception of the QWL of the faculty members in the university has the tendency to reduce their intention to depart from the university by 17.6%. However, as to the overall satisfaction of the academic staff with respect to the rewards and benefits, an increase in the positive perception of the academic staff concerning the rewards and benefits, decreases the academic staff intention to depart by 15.4%. Two of the antecedents, altruism dimension of organisational citizenship behaviour (β=.113; P=.064) and job satisfaction (JS) ($\beta = .207; P = .051$) were found to be slightly significant. The rest of the latent variables did not predict the academic staff's intention to depart from AAU (Table 5.25).

Table 5.26: Unstandardised and standardised regression weights: HU

Paths			Unstandardised regression weights (coefficients)	Standardised regression weights (coefficients)	S.E.	C.R.	P
Turnover Intention	<---	Procedural Justice	.126	.093	.144	.875	.381
Turnover Intention	<---	Altruism	.072	.040	.146	.495	.621
Turnover Intention	<---	Job Characteristics and Work Conditions	-.393	-.283	.162	-2.430	.015
Turnover Intention	<---	Leader-Member Exchange (LMX)	-.446	-.290	.170	-2.619	.009
Turnover Intention	<---	Rewards and Benefits (R&B)	-.472	-.280	.155	-3.042	.002
Turnover Intention	<---	Job Satisfaction (JS)	-.032	-.023	.187	-.169	.865

Source: Primary data (2017)

As can be seen in Table 2.26, the three constructs statistically significantly predicted the academic staff's propensity to depart from HU. These are quality of work life, leader-member exchange/relationship, and rewards and benefits. Accordingly, quality of work life (β=-.283; P=.015), Leader-member exchange (LMX) (β=-.290; P=.009), and rewards and benefits (R&B) (β=-.280; P=.002).

5.6.3.5. Structural model fit indices

The goodness-of-fit of the structural model was determined after an iterative generation of series of path analysis. The complex but final path analysis model displayed all the relevant variables (including the latent or independent and the dependent variables). Table 5.27 below is a summary of the goodness-

of-fit indices of the structural model across the three universities computed and based on the final path analysis.

Table 5.27: Structural model fit indices across the three universities

Fit-Indices	Fit Values			Criteria
	AAU	HU	UKZN	
X^2/df	1.472	1.371	1.599	<5
IFI	.951	.953	.908	>0.9
CFI	.950	.952	.906	>0.95
RMSEA	.042	.042	.069	<0.08

Source: Primary data (2017)

As shown in Table 5.27, a few measures were employed to evaluate the adequacy of the model using the fit indices for the three universities. The criteria employed to evaluate the overall fit of the model across the three universities were X2/df, RMSEA, CFI, and IFI. The result shows that the model is structurally fit for all three universities for the respective variables. Also in the above table, the fit indices for AAU show that the X^2/df <5, IFI >.9, CFI>.95 and RMSEA <.08, justifying that the model is indeed a good fit. In the same manner, the model is structurally fit for HU with the X^2/df <5, IFI >.9, CFI>.95 and RMSEA <.08. For UKZN, the majority of the fit indices fulfil the minimum criteria despite the CFI value (CFI=.906) which falls a little short of the suggested benchmark. Yet, it is still a reasonable figure given the complexity of the model tested and hence it is justifiable to accept the model.

5.6.3.6. Path analysis

Path analysis is the second step in the structural equation modelling process which explains the extent of influence of the latent variables (the independent variables) on the outcome or independent variables at the three universities. It is a pictorial representation of the relationship between the two variables (antecedents or determinants and the academic staff's intention to leave, at the three universities). It was constructed based on the measurement model that passed both the reliability and validity of tests and that meet the fitness indices. Thus, the following diagrams (Figures 5.18 to 5.20) depict the paths between the independent (antecedents to) and dependent variables (academic staff intention to leave) at the three universities studied.

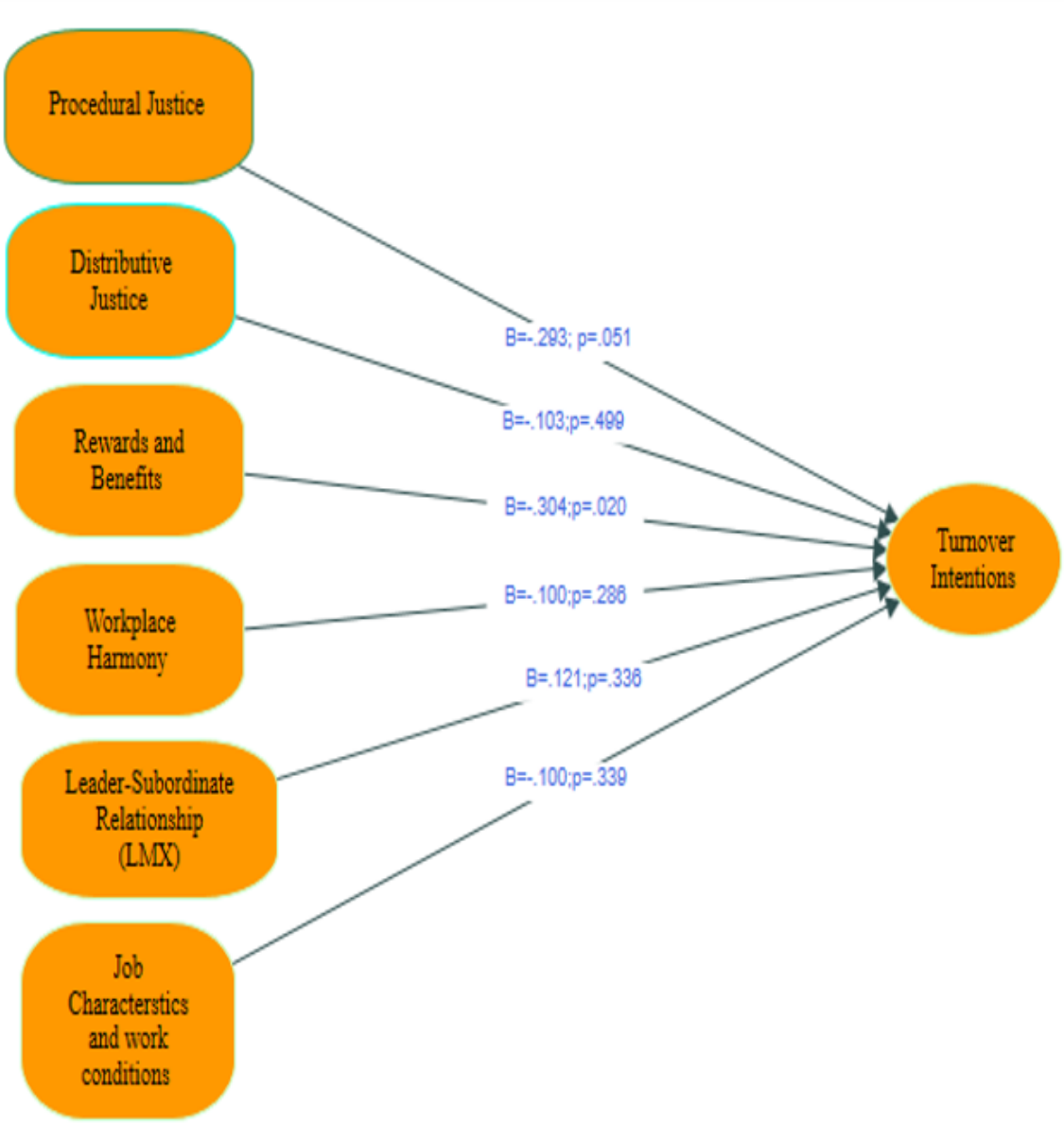


Figure 5.18: Antecedents to academic staff propensity to depart: UKZN

Source: Author's own analysis of quantitative data (2017)

Figure 5.18 shows the path between the outcome variable and predictor variable in the context of UKZN. It is evident that of the six paths, the R&B and IL is the significant path with($\beta = -.304, P = .020$). The negative value tells that an increase in R&B causes a decrease in IL (intention to leave). Thus, R&B negatively and significantly influences academic staff's intention to leave at UKZN and the result revealed that remuneration packages seems the most important factor for UKZN staff. In addition, OCB PIRIH has a slightly significant negative effect on academic staff's propensity to depart from UKZN despite the p value which is greater than .05. Yet, it can be reasonably argued that OCB PIRIH can also slightly negatively influence academic staff's intention to leave UKZN (see Figure 5.18). The next diagram shows the path analysis for data obtained from AAU.

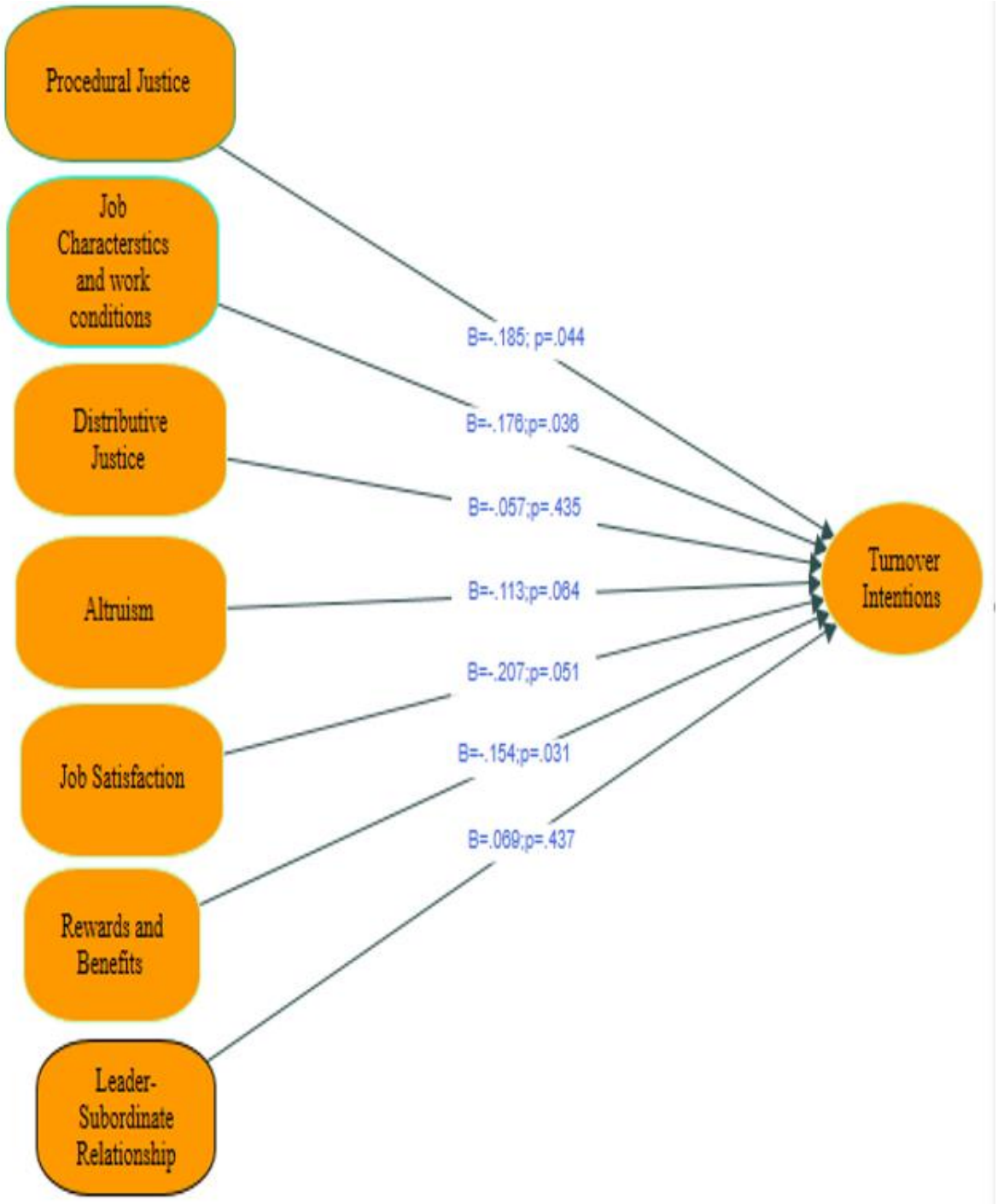


Figure 5.19: Antecedents to academic staff propensity to depart: AAU

Source: Author's own analysis of quantitative data (2017)

As shown in Figure 5.19 above, the model for AAU includes a path from job characteristic dimensions of QWL_JC, OJ dimensions, JS, LMX, R&B and the altruism dimension of OCB_A to academic staff's propensity to depart from the university. Among the latent variables, only three were found to be significant. These are the job-related characteristics of the QWL_JC, OJ_PJ and R&B dimensions of the antecedents of academic staff's intention to leave. When compared across the three latent

variables which were identified to influence the intentions of the academic staff to depart from their institutions, relatively speaking, procedural justice's influence is higher. For instance, the figure shows that an increase in the perception of academic staff regarding the procedural justice within the university decreases the academic staff's intention to leave by 18.5%, whereas an increase in the perception of the quality of work life of the academic staff members in the university has the tendency to reduce their intention to depart from the university by 17.6%. However, as to the overall satisfaction of the academic staff with respect to the rewards and benefits, a unit increase of the positive perception of the scholarly staff regarding the rewards and benefits decreases the academic staff's intention to depart by 15.4%.

Two of the antecedents were found to be slightly significant. These were the altruism dimensions of organisational citizenship behaviour (OCB_A) (β=.113; P=.064) and job satisfaction (JS) ($\beta = .207; P = .051$). The rest of the latent variables did not predict the academic staff's propensity to depart at AAU (See Figure 5.19). The next diagram shows the path analysis for data obtained from HU.

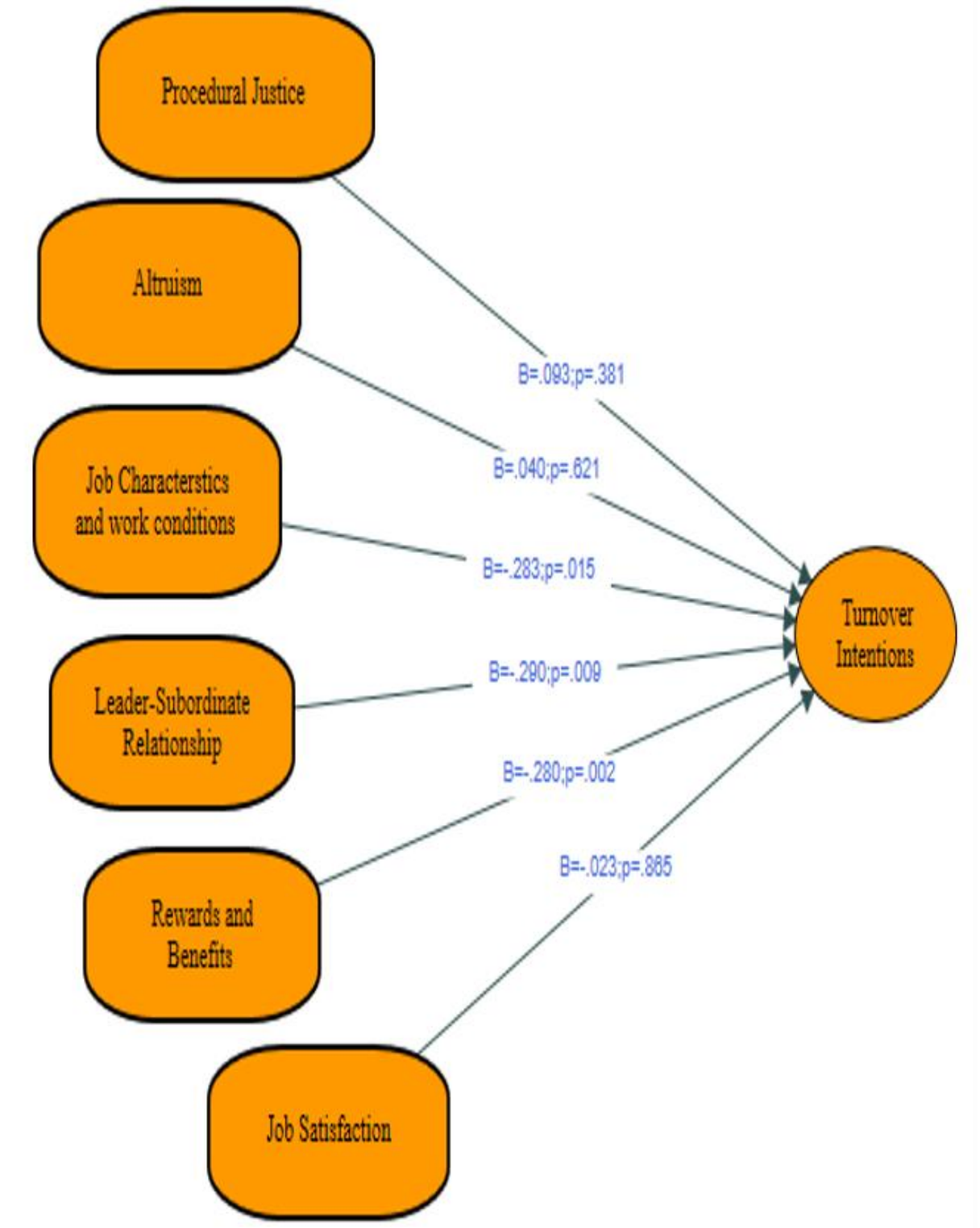


Figure 5.20: Antecedents to academic staff propensity to depart: HU

Source: Author's own analysis of quantitative data (2017)

As shown in Figure 5.20, the model for HU includes a path from JS, R&B, and the altruism dimensions of OCB, OJ_PJ, LMX and job aspect or QWL to the academic staff's propensity to depart from the university. Among the latent variables, only three were found to be significant. These are the job

characteristics dimension of Quality of Work-Life (QWL)($\beta = -0.283; P = 0.015$), leader-subordinate relationship (LMX) ($\beta = -0.290; P = 0.009$) and rewards andwBenefits (R&B) ($\beta = -0.280; P = 0.002$). However, the rest of the latent variables such as the altruism dimensions of OCB (OCB_A) and procedural justice were not found to be significant predictors of academic staff's propensity to depart from HU (see Figure 5.20). The next sub-section discusses vulnerability to and causes of brain drain at the three case study universities, based on qualitative data obtained via face-to-face interviews with the key informants.

5.7. VULNERABILITY TO AND CAUSES OF BRAIN DRAIN

Analysis of the findings based on the key informant interviews across the three universities indicated that there was some level of susceptibility to brain drain or academic turnover due to different factors that are both internal and external to the institutions.

5.7.1. Vulnerability to brain drain at the three universities

The vulnerability of the institutions to academic staff propensity to depart was assessed across the three universities using qualitative data.

5.7.1.1. Addis Ababa University's susceptibility to brain drain

The persistent rise in cost of living in the metropolitan Addis Ababa and the extremely low level of pay for academics in the public institutions are the two major factors behind susceptibility of the institution to brain drain. Analysis of the key informant interviews revealed that six out of ten respondents had the propensity to leave the institution particularly to join the industry. At Addis Ababa University, brain drain does not necessarily involve the physical departure of the academics; instead it is more psychological and virtual in nature (a new approach to the study of brain drain in the future). The key informant interviews held with academics and administrators in the technology faculties revealed that academics are engaging more in the industry than in the university while they are actually active employees in the university. This incident is believed to curtail and jeopardise the ability of the university to execute its mission.

Characteristically, the mobility of academics in Addis Ababa University is from a university to other national and international institutions as the city is the hub of African diplomatic and international bilateral organisations such as the Economic Commission for Africa (ECA), African Union, and other organisations. Other private higher learning institutions were also the main sources of temptation for academics for 'moonlighting' compared to those universities located in the relatively distant locations if not rural areas. Moreover, academics are subject to multiple numbers of appointments at times without the knowledge of the university and the university does not have the resolve to stop the

academics from being employed in other organisations. This reluctance to stop because the universities are probably aware of the widening gap between what the academics require to settle bills to lead a life and what they are actually getting from the university. Thus, since they realise that employees need to sustain their life and that of their families, the university administration is reluctant from being serious about such practices. At times, academics seem to be losing interest or motivation to pursue academic careers such as publishing and attending PhD studies because they consider it a waste of energy and time for no or little return since the reward they get after long years of PhD study is not significant enough to motivate them to pursue the career. Only those with a strong passion for academics dare to continue their career as academics, including pursuing PhD studies. However, some of those academics who have an excellent academic track record and are not satisfied with the way the university is running its business, take steps to leave the country and seek for international posts elsewhere in the world, including Southern African countries (e.g., Namibia, Botswana and South Africa), without mentioning those who migrate to the global north (e.g. USA, Canada, Australia and European countries, etc.).

5.7.1.2. Haramaya University's susceptibility to brain drain

An analysis of the subjective information collected via face-to-face interviews revealed that the vulnerability of Haramaya University to brain drain emanates from, among other things, its physical location. The university is located far away from the centre and thus academics mostly feel that they are disadvantaged compared to their peers who are working in a city with a relatively better infrastructure for themselves and their families. The data also revealed that the academic staff members feel that the location of the university has limited their capacity to generate alternative and additional income to sustain their life and the life of their family members. In addition to that, the security situation and the political trend (largely ethnic-based) unfolding in the last 27 years (since the fall of the Dergue regime in 1991) led to political turmoil over the last three to four years. This situation has resulted in power reshuffling in the country which has largely influenced young and seasoned academics to leave the university, most often to join sister public universities located closer to their family or places of birth. This type of mobility has been eminent in most of the Ethiopian universities, including Haramaya University, in the recent past. Although is difficult to verify the actual numbers, discussions with the key informants revealed that the university has lost prominent and highly qualified academics to the rest of the world, including Southern African countries and the global north such as the USA, Canada, Australia and European countries.

Academic brain drain or mobility takes via different routes at Haramaya University. The following diagram best describes the mobility phenomenon at the university based on the data obtained through interviews and personal experiences.

5.7.1.3. University of KwaZulu-Natal's susceptibility to brain drain

Assessment of the recent annual report of the university revealed that the university has appointed a total of 1 117 staff and over the same period 234 staff members left UKZN of which 52.99 %, 16.67%, 20.94% and 5.98% were due to resignations, retirements, non-renewal of contracts and death respectively (UKZN, 2016:57). In 2015, UKZN appointed a total of 195 staff members and during the same period, 100 staff members left UKZN with an overall staff turnover rate of 10% which was relatively similar to that of 2014 and 2013. The majority of the staff members left on their own in the form of resignations (59%), retirements (25%), non-renewal of contacts (13%) and only 1.3 % of terminations were due to death (UKZN, 2015:56). From a race point of view, the majority of those who left the university were Black employees and at the same time, the majority of those who who were newly appointed were also Black.

In addition, analysis of qualitative information obtained through face-to-face interviews with six key informants from UKZN revealed that South Africa loses quite a high number of academics to western countries, yet also gains many good African academics and other academics from the rest of the world including Asian countries. The key informant noted that: ″We lost some and also gained some from the rest of Africa. We have lots of good African academics. South Africa has actually gained from other African countries. If you look at top 30 researchers in UKZN, you will find very few South Africans and see quite a good number of academics from other parts of the world including Asia and other African countries" (Key Informant Interview, UKZN01, 2017). The key informant was of the notion that the net effect in terms of staff migration or mobility is still positive in South Africa due to the fact that South Africa is relatively economically viable and is able to attract quite a good number of outstanding academics from the rest of African and Asian countries. The vulnerability to brain drain at UKZN particularly for young and less-established academics is related to a stressful work environment and stringent performance criteria as UKZN is emphasising research activities over teaching. The key informant noted that such practices may: *"*… pushes aspiring academics to look for other universities that do not focus much on research activities*″* (Key Informant Interview, UKZN04, 2017).

5.7.2. Causes of brain drain at the three universities

The following part examines the key factors influencing academic staff's intention to leave, across the three universities. The factors were identified separately for each of the universities. When compared across the three universities, salary was cited as one of the key reasons influencing academic staff intention to depart or stay in the institutions. There was no difference across the universities operating in various socio-economic and political contexts. Overall, without comparing the amount paid to academics working in the South African university and the two Ethiopian universities, there is a

general trend that the industry pays much higher than the higher education in both countries. Yet, in terms of magnitude, there is an enormous difference between what is being paid to Ethiopian professors working in the two Ethiopian universities and that being paid to professors at the South African university. The next sub-section reports the key reasons for the departure of the academic staff at the three universities.

5.7.2.1. Causes of brain drain at AAU

Three main factors were identified in the face-to-face interview: payment or salary, lack of conducive working conditions and the absence of proper retention policies and strategies. Four key informants (AAU 01, 03, 10 and 04) identified payment related issues as the key factors for the susceptibility of academics staff to brain drain both within the country and out of the country. The majority of the key informants argued that the salary amount paid to the qualified and competent academics is very poor and the lowest. In this regard, one of the participants indicated that *"*… The pay is very poor and the lowest. Those who are employed in NGOs with average academic performance are getting some five folds of the salary paid to highly qualified and competent academic staff. But these academics are highly needed outside the university context both locally and outside of the country. It is due to this reason that many decide to remain aboard after completing their terminal degrees" (Key Informant Interview_AAU01, 2017). Another key informant also stated that: "The primary driving reason I believe is the finance reason with the growing cost of living is getting higher and the price of goods and other commodities will be higher. [The] purchasing power will be lower. People may look desperately to fill the gap from elsewhere. Money is the primary driver for brain drain both locally and out of the country"*(*Key Informant Interveiw_AAU03, 2017). Another key informant stated that the poor pay structure had led the academics to 'moonlight' in order to fulfil their basic needs. In the words of the key informant: "AAU is the oldest university in the country and the university has not been facilitated in terms of budgetary support for research and for various projects that can be the main activity area for professors so that they can make their time useful in teaching and as well as in research. Because of this reason, the academic staff quite often look outside the university to meet their basic needs and this is I think the most important reason of dissatisfaction for academic staff to stay in the university and also in the country" (Key Informant Interview_AAU10, 2017). Another key informant argued that the financial reason is one among the many reasons why people leave their institutions. Some of these reasons also include political and financial. The key informant further emphasised that the lack of sufficient pay for academics made it difficult for academics working at Ethiopian Universities to lead a decent life, as stated: *"*For people to leave they have their own reasons- financial, political or technological reasons. If one is trained in the sophisticated area, they may decide to stay there because there is no facility to implement the knowledge gained back home. Those who leave for

financial reasons are understandable but not justifiable. Today it is difficult to lead a decent life, it is difficult" (Key Informant Interview_AAU04, 2017).

Analysis of the information based on the face-to-face interviews further revealed that working conditions/working environment is another key factor for the susceptibility of the academic staff to depart from the university. The key informant opined that many of the academics may not feel comfortable with the current working conditions in the institution because of various reasons. The key informant stated that: "People could aspire to look for better working conditions than the current state of nature. For a number of reasons, many people may feel uncomfortable with our current working conditions because of the massification of the student population and the pressure we put on them due to the changes we initiated, comply to do research, bring money to the university, evaluated by students, by their colleagues and boss and some people may not find this comfortable and for such and other reasons people may find it hostile to them and may decide to leave. There is a good number of people who left the university citing such reasons. People may not be comfortable with the current working conditions"*(*Key Informant Interview_AAU03, 2017).

Another key informant has also opined that poor retention policies and strategies pose a problem. Key informants argued that it is the personal conviction of the academics that made them stay rather than the retention policies and strategies designed by the university. One of a highly qualified and experienced academics working with the rank of full professorship in the college of health and medical sciences stated that: "Personal philosophy and decision have an impact on the decision to stay or leave" (Key Informant Interview_AAU04, 2017).

5.7.2.2. Causes of brain drain at HU

Analysis of information gathered through the key informant interviews at HU revealed that pay, working conditions, poor retention policies and strategies, political instability, technology and infrastructure, dissatisfaction and the rules and structures were some of the key issues that influenced the academic staff's decision to depart from their institution.

The first factor that was identified among various respondents was the issues related to pay. Salary was identified as the major factor influencing the decision of the academic staff to leave Haramaya University. The majority of the key informants from HU (03, 09, 01, 04, 02, 08, 10, 11, and 13) regarded pay as the key factor for the departure of academic staff from the university. The amount of pay for academic staff at HU in particular and other sister public universities in general was argued to be low and less attractive compared to similar universities in eastern Africa as well as the rest of the world. One of the respondents opined that*: "*...university professors earn less especially in Ethiopia compared to other African countries*" (*Key Informant Interview_HU09, 2017). Another key informant

echoed this and stated that the salary amount paid to Ethiopian academics is the "least…on earth" (Key Informant Interview_HU03, 2017). Another prominent professor with many years of experience both in the academic and higher education leadership pinpointed that salary is one of the key issues in the university and the sub-sector, stating that: "University salaries are very low compared to other countries. When you go to international conferences your salary is very low compared to international standards… Academics usually don't focus on financial issues but it affects their life and their families. It is a distractor from their work and that is something that needs to be adjusted" *(*Key Informant Interview_HU10, 2017).

However, there were academics who argued that salary is not the only reason as there are additional causes including time freedom. Professors and academics decided to remain in the university despite the low salary provided that there is an enabling working environment. In this respect, one of the key informants stated that "…only salary may not be the case. For instance, in Germany, the outside system (the industry) pays more but professors prefer to work in the university system than getting employed in the industry because they want to give sufficient time to their family" *(*Key Informant Interview_HU03, 2017). In addition to the pay, the physical location of the university was raised by many of the respondents (Key Informant Interview_HU04, 01 & 02, 2017). In order to overcome the locational challenge, one of the respondents has proposed that "Universities should be given the discretion to set their own salary and shay away from overreliance on a single source of fund (the government in this case)" and in order to pave the way for institutional autonomy and "…autonomy comes from who actually pays" (Key Informant Interview_HU08, 2017).

Furthermore, another key informant echoed that pay matters in influencing academic staff's decision to stay or leave in that*:* "... People are not being paid on par with their level of education and with the soaring expenses, people don't cope-up with the pay they get. Moonlighting is becoming a common problem. This is to cope up with the life issues. So, pay is the major reason" (Key Informant Interview_HU10, 2017). This was complemented by another key informant stating that "The salary is not attractive. Even those who are around are seeking additional jobs"(Key Informant Interview_HU11, 2017). Another key informant, however, viewed the matter from a slightly broader perspective mentioning that economic factors such as the quest for enhancing income status is what drives academics from periphery to the centre. He noted that the intention to depart mainly has to do with the economic aspect manifested in terms of salary, housing, and relocation to the centre (Key Informant Interview_HU13, 2017). The key informant further noted that: "People want to be economically empowered. One of the pulling factors is the economic factor"(Key Informant Interview_HU13, 2017).

The second major factor influencing the departure of academic staff was the working conditions in the university. Two of the key informants (HU03&06) indicated that the lack of enabling working

conditions is the main cause of the academic staff's decision to either depart or stay. In the words of the key informant (HU03), **"**Salary may not be the only reason. But, the lack of enabling environments such as lack of academic freedom or lack of schooling facilities for the family could be the reason in the context of HU" (Key Informant Interview_HU03, 2017). Furthermore, key informant HU06 argued that "It is not the salary that people are looking for [rather] it is a working environment.People leave for cities seeking a better life for their family and this has influenced the academic staff to leave" (Key Informant Interview_HU06, 2017).

The third factor referred to the poor retention policies and strategies. One of the key respondents stated that the problem is the lack of well-designed and integrated retention policies and strategies within the university. In the words of the key informant, "This University is locationally disadvantaged and people have the sense of overexploitation. Because of this, they prefer to leave the university since the university is not designing strategies to retain or reduce staff turnover so far"(Key Informant Interview_HU02, 2017).

The fourth theme identified was related to political factors. This factor is common to all the institutions in the country. However, Haramaya University was severely impacted by a political phenomenon in the country over the last five to six decades for the loss of human capital, particularly to the western world. One of the key informants in this respect believed that the overall political climate and the feeling of insecurity drove prominent academics out of the university (both locally and internationally). There was major political upheaval in the country (the abduction of Haile Selasie in 1974 and the fall of Dergue in 1991) that resulted in the departure of highly qualified and skilled professionals out of the country. And in the recent past, in addition to their mobility out of the country, there was an emerging trend of internal mobility of academics to join an institution closer to their place of birth. This was primarily due to a sense of insecurity emanating from the on-going political turmoil in the country as indicated herewith: "The other reason is that people are insecure (feeling of insecurity). Because of the political turmoil happened this year, many of them wanted to move to their places of birth and this is because of the feeling of insecurity and this happened since last year" (Key Informant Interview_HU04, 2017). Furthermore, another key informant from the same institution who had worked in the institution for about 35 years and was now taking the highest office in the university with the rank of full professor underlined that political instability greatly influenced the departure of academic staff from the Haramaya university, considering some historical accounts. In the words of the Key Informant, this has happened twice. The first exodus happened during the Ethio-Somali War which took place from July 13, 1977, to March 15, 1978, for about 8 months and 2 days. HU was victimised due to its proximity to the war-zone. The second major departure of the elite from the country in general, and HU in particular, happened during the transition government followed by the downfall of Derg in 1991 which resulted in the huge exodus of academic staff from HU. The key

informant described that: “The other reason is political instability during the Somali war. Almost 100 percent of the staff left and we had to start from the scratch. The other one was during the government transition- political issues and other issues have caused enmass exodus of staff from Haramaya University. Political issues and other issues have caused an exodus of academic staff from Haramaya University …where there are a good or better opportunity" (Key Informant Interview_HU06,2017).

The fifth factor was the lack of appropriate technology and infrastructure to apply the already gained skill either locally or abroad through training and personal development. This phenomenon is eminent specifically in the discipline of Science, Engineering, and Technology. One professor from HU described that: “The lack of state of the art technology and equipment to conduct experiment and conduct research for publication apart from the reasons mentioned above are also some of the drivers of academic staff turnover especially at senior level at HU. Thus, the lack of infrastructure makes them look for joining other organisations" (Key Informant Interview_HU04, 2017).

The sixth factor was the feeling of dissatisfaction among academics due to a number of factors. One of the key informants stated that: "The lack of appreciation for those who dedicate themselves to the university’s cause is a source of dissatisfaction. For instance, I have been working here [in the university] for about 37 years and I have never been appreciated for my service. I didn’t expect anybody to appreciate me either" (Key Informant Interview_HU06, 2017). The key informant had the feeling of inequity with respect to recruiting expatriate staff from specific Asian countries with comparable or lower qualifications and who do not perform as well as local professors who have either equivalent or more qualifications with international exposure and academic standing. He indicated that the university: “... recruits fellows from aboard who are less capable and productive than us with a significantly high pay" (Key Informant Interview_HU06, 2017). It was argued that sometimes the source of dissatisfaction goes beyond the institution: “There is a lack of recognition both by the government and the society at large. People talk about other professions neglecting teachers who are producing doctors, engineers, managers, innovators, etc. Lack of social respect. There is a perception by the society at large that teachers are poor” (Key Informant Interview_HU07, 2017). Another key informant stated that there is a general declining trend in job satisfaction among academics who have been waiting for an opportunity to leave for the centre where they can earn relatively better through the generation of an alternative income. The key informant further indicated that: “Job satisfaction is declining. I am communicating with my colleagues. They want to be at the centre. They are earning a huge sum of money. Green pastures elsewhere are another reason" (Key Informant Interview_HU08, 2017).

The seventh factor for the departure of academic staff related to the rules and structures (change and adjustment). One of the key informants from the same institution stated that: “The structural adjustment program of World Bank and IMF has contributed to the depletion of academic staff. But,

now a day there is a change of attitude by the World Bank. They have started to establish centres of excellence in African countries" (Key Informant Interview_HU09, 2017). Furthermore, the problem of organisational restructuring that contributed to the withdrawal of academic staff emanated from the adoption of the structural adjustment programmes both at the national level. The key informant stated that: "University administration has been reshuffling and that may contribute to the turnover" (Key Informant Interview_HU12, 2017).

5.7.2.3. Causes of brain drain at UKZN

In the same way as at AAU and HU, the departure of academic staff at UKZN is largely influenced by salary and in search for better opportunities elsewhere. One of the participants mentioned that: "The main reason is mostly salary. They are going for a higher salary. In some instances, they were going due to promotion"(Key Informant Interview, UKZN06, 2017). Another respondent who has decided to leave the university at the time of interview has indicated that "… the personal financial reason" was the main reason for his departure (Key Informant Interview_UKZN04, 2017). The key informant further specified that, "the lack of clarity on the career development and the stringent performance criteria in the university especially in the areas of research" were some of the causes of the departure in addition to the financial reasons (Key Informant Interview_UKZN04, 2017). Another key informant who was an academic leader and a senior professor in one of the schools vulnerable to academic staff turnover strongly believes that there is a wide discrepancy between what academics are getting and what the industry pays for a comparable field of specialisation. She stated that:

*"*People working in the industry at admin level are paid much more than what academia is being paid compared to their level of education and training. There are two conditions of services: New and old services of conditions and the cash packages are different under these two conditions of services. It is important that academics should love their job, but what you take home is important" (Key Informant Interview_UKZN02, 2017).

The second factor was related to working conditions. Key informants from UKZN indicated that the departure of academic staff is related to the sense of dissatisfaction with the working climate or working environment. One of the respondents pointed out that working climate was the major motive for the intention of academic staff to depart, in addition to promotion-related factors which are believed to be too high a standard and stringent (Key Informant Interview_UKZN03, 2017). Another key informant from the same institution described that: *"*It's not a payment issue rather the overall satisfaction or dissatisfaction with the working environment is something that basically influences them to leave. People leave because of unhappiness or discontent due to the working environment is not giving the staff to expand their wings, contributing, appreciating and don't feel that they are

involved in the decision making process and the feeling of the lack of belongingness" (Key Informant Interview_UKZN05, 2017).

The third factor causing the departure of academic staff was the feeling of dissatisfaction resulting from the lack of recognition and the feeling of inequity in the system. The key informants who had already decided to leave the university at the time of the interview indicated that: "The lack of recognition and the feeling of inequity is the second most reason for me to leave [in addition to financial reasons]! My second university recognised my credential and appointed me for a lecturer position which I was developed for" (Key Informant Interview_UKZN04, 2017).

The fourth factor that came out during the interviews with UKZN respondents was related to retirement age". One of the key informants who is the HR manager in one of the colleges vulnerable to academic staff turnover identified the issue of retirement as one of the key reasons for the departure of academic staff, particularly senior faculty members, due to the university's "stringent policy of performance expectations after the retirement". The key informant further described that: "We [the university] lost some academics at early 60 years due to our stringent policy of performance expectations after retirement. In terms of the magnitude of the departure, the college lost 31 staff including temporary staff (fixed term and causal works) and 17 permanent. The figure includes both support staff and academic staff" (Key Informant Interview_UKZN06, 2017).

5.8. CONSEQUENCES OF BRAIN DRAIN/ACADEMIC TURNOVER

The departure of academic staff has both negative and positive consequences. The analysis of the information obtained through the face-to-face interviews indicated that the departure of qualified and competent academic staff in the broadest sense has damaging consequences on the overall performance of the institutions in the areas of teaching-leaning, research and community services. More specifically, the phenomenon leads to the depletion or loss of value in human capital, difficulty of replacement of those who left the university, reduces research productivity, impacts the overall process in the university system, and finally, it impacts the quality of education. Similarly, the key informants highlighted that the depletion of qualified and competent academic staff further deteriorates the national skill base with a wider influence on the overall performance of the rest of the sectors.

5.8.1. Impact on the overall performance of the universities

Key informants from the two Ethiopian universities (AAU & HU) argued that the quitting of qualified and competent scholarly staff adversely influences the overall performance of the universities. For instance, one of the key informants who is a senior professor holding a higher administrative position at AAU indicated that the departure indeed has both a short-term and long term adverse effect, stating that: *"...*after all university is all about people. AAU has experienced people and knowledge asset

which the university is proud of and when you lose such highly qualified and knowledgeable staff you lose your image and reputation with that degree. So the immediate effect is losing that asset and definitely you are going to replace with a less qualified and less experienced, less committed, and with the people who don't know and understand the culture of the university" (Key Informant Interview_AAU03, 2017).

In the same line of argument, a key informant viewed the impact in terms of limiting the university's capacity to attain its goals, as indicated herewith: "[the departure] affects the capacity of the university to attain its goals, mission, and vision" (Key Informant Interview_HU01_2017). The other negative impact is related to the "loss of value" as discussed in the next section.

5.8.2. Loss of value

In the knowledge-based society, losing experienced employees is beyond measure as it leads to loss of value accumulated over years. In this respect, one of the key informants from AAU narrated that losing academic staff, who are presumed to be valuable and irreplaceable assets, may pull down the institution to an ordinary one eroding its reputation and threatening its future. The key informant further noted that: "AAU is a big university for many years and over the long years of this establishment there is a value that is created and culture that is shared among the staff and when you lose such kind of staff you are going to lose that value, lifestyle, experience and knowledge asset and in the long run it drives the university's reputation to ordinary institution. So that is our threats" (Key Informant Interview_AAU03, 2017).

5.8.3. Difficulty of replacement

Some of the key informants from the two universities (UKZN and HU) identified difficulty of replacement of the employees as a key challenge facing the universities and which results in the departure of scholarly staff. A key informant at HU stated that: "Replacement is a challenge, especially with the same specialisation. It seriously affects the capacity of the college to develop the postgraduate program in particular" (Key Informant Interview_HU01, 2017). Another key informant from the same institution also indicated that those with terminal degrees are the ones difficult to replace, as stated herewith: "Those with a terminal degree are difficult to replace them" (Key Informant Interview_HU04, 2017). In line with this argument, another key informant from the same institution stated that through replacement is possible, the likelihood of getting experienced staff is minimal. The key informant further stated that *"*Replacement is okay but the experience and the capital invested is already gone" (Key Informant Interview_HU, 2017).

In a similar fashion, a key informant from UKZN stated that*:* "Replacing them is challenging. We are losing them because of either retirement or other reasons. With the slow promotion, it is very

challenging to replace the reputed ones. When you lose academic, you lose tacit knowledge" (Key Informant Interview_UKZN02, 2017).

5.8.4. Impact on research productivity

Research productivity is another area that is affected by the departure of academic staff. In today's knowledge economy and globalised world, research productivity is key to success among universities across the world. Thus, losing academic staff leads to declining research productivity in the universities which jeopardises the competitiveness of the universities. In this regard, key informants from the two Ethiopian universities emphasised that the departure of academic staff has an adverse effect on the research productivity of the universities. Findings from the analysis of qualitative information revealed that the departure of academic staff has a negative impact on research productivity. The key informant further described that: "When there is staff turnover, it has a great impact on the quality of research and training. When you don't have senior staff you assign juniors. Students are better off if they are trained by senior staff"(Key Informant Interview_HU09, 2017). Another key informant from AAU articulated that the departure of qualified scholarly staff has indeed adversely impacted the scholarly performance at the institutional level especially with respect to research outputs.

5.8.5. Impact on the university processes

The majority of the respondents from HU (# 2, 4, 10, 12 and 13) indicated that the departure of academic staff impacts the overall university process. The phenomenon impacts the university's ability to run the postgraduate programmes effectively since there is the lack of retention of the academic staff with terminal degrees which are key input or resources for the university. Furthermore, the departure of academic staff (especially with a terminal degree) impedes the overall activities in the university. In the words of a respondent regarding the departure of academic staff:

"... seriously affects the capacity of the college to develop the postgraduate program in particular and the execution of the three pillars of the university-learning-teaching, research and community engagement" (Key Informant Interview_HU02, 2017). Another respondent from the same institution have mentioned that: "The lack of qualified staff impacted the execution of both undergraduate and postgraduate programs."(Key Informant Interview_HU04, 2017). Another key informant stated that the departure of academic staff: *"...* Impacts our postgraduate programs. It also affects our teaching-learning. It affects significantly the quality of service- service, teaching-learning and research quality is impacted due to that reason"(Key Informant Interview_HU_2017). The very reason behind weak postgraduate programs was attributed to the loss of academic staff as mentioned herewith: "If we lose professors we lose everything. In many instances, we are unable to train a large number of academics.

We don’t launch programs even if we need because of the lack of qualified professionals (Ph.D.) in the system" (Key Informant Interview_HU13, 2017).

In a more comprehensive statement, a key informant from the same university elaborated that the departure: *“*... is really harmful because we lost resources but not only the individuals. We recovered but we could have done something better than this. We had planned to establish Ph.D. centred programs but that has now stopped. This is one of the biggest issues. We lost half of our staff years ago. Replacement is okay but the experience and the capital invested is already gone. There is a high turnover. We lost so much staff" (Key Informant Interview_HU12, 2017).

5.8.6. Impact on quality of education

Quality of education is one of the areas most affected by the departure of experienced and qualified academic staff. One of the participants from HU highlighted that the departure of academic employees adversely impacts the quality of education in the university, as stated herewith: "It [the departure] negatively affects the quality of education in the university"(Key Informant Interview_HU09, 2017). In the same tone, a key informant from AAU indicated that the phenomenon jeopardises the capacity of the university to meet quality standards:

“Quality is one of the challenges that the Ethiopian higher education is facing in Ethiopia. There is a quality assurance office but we are doing nothing to improve. We will continue but we may not offer the quality of education"(Key Informant Interview_AAU01, 2017).

5.8.7. Impact on community services

Regarding the analysis of the qualitative data, there was also clearly stated that: "It [the departure] significantly affects. I will start with the community service. We have a hospital that serves close to 6million people. When one specialist leaves, we won’t be able to provide a health care facility to the hospital"(Key Informant Interview_HU10, 2017).

5.8.8. Impact on national skill base

The loss of people of high calibre in the country, particularly from the higher learning institutions, has bearing effects on other sectors. It hampers the national economic, social, political and technological development. In this respect, a key informant from HU stated that the phenomenon has a national level impact both in the short run and long run as stated herewith:"...definitely this country needs highly trained professionals in different professions. When you lose professors from the university you are losing other professionals from other sectors. The country is striving to become middle-income country and that is largely impossible without having competent professors in the university setting. High-level

professionals are required and it is impossible to bring the country to the aspired level without these high intellectuals" (Key Informant Interview_HU13, 2017).

5.9. MANAGEMENT AND MEASUREMENT OF BRAIN DRAIN

An exploratory research with the goal of identifying the existence of a system for measuring the nature and extent of academic brain drain or turnover at the three institutions revealed that the two universities from Ethiopia (AAU and HU) lack institutional mechanisms to measure and detect the magnitude and extent of brain drain in their respective institutions as opposed to the South African counterpart which mainly has the culture of conducting an exit interview to understand the factors contributing to the departure of academic staff from the university. It was noted that at the universities there was a lack of proper documentation of the departures of academic staff and retaining appropriate statistics for making strategic human resource decisions such as talent retention. Further, it was observed that there was a certain degree of informality and poor human resources management information systems (HRMIS) in the universities with the exception of UKZN where there is a relatively better infrastructure and system for tracking the departure of academic staff. “Yet, the information solicited through the exit interview at UKZN is not capable of providing adequate information for decision making partly due to the lack of willingness of the faculty members who are leaving to provide information to their respective colleges and that is what makes the management of exit interview difficult at UKZN” (Key Informant Interview_UKZN04, 2017).

5.10. HR POLICIES AND STRATEGIES WIDELY PRACTISED

This sub-section discusses some of the widely practised HR policies and strategies across the three universities in relation to the retention of academic staff. Some of the common HR practices that were raised by the respondents were induction programmes, coaching and mentoring, performance management practices, rewards and benefits, training and development, opportunities for career advancement, recruitment and selection, and communication system in the organisation and finally the challenges and constraints facing the universities in terms of attracting intellectual diaspora. The following sub-themes were identified through the content analysis.

5.10.1. Induction programmes

The majority of the respondents who replied to the question on the extent to which induction programmes are being practised in their university were from HU, with one response from UKZN and no response from AAU. Respondents from HU highlighted that the current induction programme has limited scope, and is less comprehensive, less intense and less frequent as opposed to the practice at UKZN which is regular and comprehensive, taking place at two stages: university and school or

discipline level. The findings from the two institutions are summarised under the next two sub-sections.

5.10.1.1. Limited scope and less comprehensive

Key informants from HU believe that the induction programme has limited scope and it is less comprehensive in terms of equipping the newly hired academics to improve and become informed academics who understand the working culture of the institutions. One of the key informants from HU explained that:

"At the university level, there is an induction program and there is no such practice at the college level. The kinds of induction activities or practices at the university level are merely focusing on the pedagogical skills. And it doesn't include Human resources and general organisational issues. Orientation should be done at all levels and even to those who come to new positions in addition to the newly recruited staff members"(Key Informant Interview_HU01, 2017).

Another key informant from the same institution reiterated that the induction session has been limited in its scope. He further stated that: "The university has such practices and newly employed staff undergoes induction training and the training focuses on how to conduct lectures and how to manage classrooms and set exams..."**(**Key Informant Interview_HU09, 2017). Another key informant from the same university added that:

"I have never been in induction but recently the university does this kind of induction on a consistent basis at the beginning of each year and I don't know what happens to someone who is employed in the middle of the year and I neither know the focus of that induction. If the focus is only on how to teach that is not complete but if they are developing the staff as an instructor that will be complete…I don't think that it contains the core values of teaching"(Key Informant Inteerview_HU11,2017).

5.10.1.2. Less intense and less frequent

The interview participants from two of the universities (HU and UKZN) indicated that the induction programme is less intense and less frequent.

For instance, one of the interview participants from HU explained that the time allotted for the induction programme was not enough and that it lacks specificity, as stated herewith, "We have one-week orientation program before they start teaching. I don't think that it is enough. It is done at the university level and not at the college level. We are very weak in that regard and we are not doing that. Universities generally do not hire fresh graduates. We are hopeful that the Quality Assurance Director

in our college will be undertaking these activities such as monitoring and evaluation and staff orientation "(Key informant Interview_HU12, 2017).

In a similar manner, the interview participants from HU argued that: "What we do is we induct them in certain areas but I don't think that it is sufficient. We induct them to understand very general issues but focus more on developing their pedagogical skills. But orientation should be more than that. It should be able to provide all the necessary information that staff is supposed to know (both admin and academic) in a form of …'Orientation toolkit'. The focus of the current orientation is on pedagogical skills rather than comprehensive induction programs...The feedback shows that the program is very helpful. We feel that it is a good training package and the scope should be more widen to include other areas "(Key Informant Interview_HU13, 2017).

However, at UKZN, the induction programme is conducted every quarter and it is a relatively fully-fledged programme. It is conducted at two levels: university and schools or disciplines. The university-level induction programme communicates general information regarding the conditions of services whereas the specific information regarding teaching and research is done at school or discipline level. In this respect, the interview participant from UKZN indicated that

"Every quarter we have a full induction program. Induction is done at two levels for academics. We communicate information about the conditions of service, such as research and deliverables, teaching, risk management and campus management, the salaries and benefits structures. The specific information on the teaching and research are done by the schools and disciplines"(Key Informant Interview_UKZN06, 2017).

5.10.2. Coaching and mentoring programmes

Analysis of data obtained from interview participants at two of the universities (HU and UKZN) revealed that there is a lack of well planned, integrated, mandatory and structured coaching and mentoring practices.

5.10.2.1. The absence of a formal institutional system

The interview participants from the two universities argued that there are no such formal coaching and mentoring practices at the university level. In this respect, one of the key informants from HU reflected that:

"In my college, we form team upon recruiting new staff. In the module team, we put the staff of all levels of academic rank. There are some starts in my college in terms of mixing staff members of the junior faculty and senior faculty to teach and conduct research activities. However, there is no such

formal coaching and mentoring practices at the university level" (Key Informant Interview_HU01, 2017).

Another participant similarly indicated there is no such formal system at an institutional level other than college/school level initiatives in the form of job assignments and module-based teaching approaches. The interview participant emphasised that: "The experience is there at the school level. Senior staff members coach junior staff members and even there is a module prepared by the ministry of education. But in the university system, there is no as such. I don't know if there is an assumption that all are qualified to be teachers. I believe that this practice is good for graduate assistants. We only have heads of departments that is coaching them. These youngsters are facing a challenge. It will be good if it is there for junior lecturers but not for senior faculty members" (Key Informant Interview_HU02, 2017).

Another participant from the same institution opined that formal the coaching and mentoring system is lacking in the university system. He narrated that: *"*The senior academics can teach the junior ones on various academic-related issues such as academic writing and laboratory management. In principle, the senior staff should systematically coach and mentor the junior academic staff members on various areas including academic development. However, in practice, such a system is lacking in the context of Haramaya University other than informal engagements. Coaching and mentoring is not part of the Key Performance Indicator (KPI) of the staff performance" (Key Informant Interview_HU05, 2017).

In the same manner, an interview participant from UKZN indicated that a formal policy guideline exists that enforces senior academics to engage in coaching and mentoring practices. In response to whether such practices exist or not, the participant indicated:

*"*We do not. There is no policy. It is done based on the initiatives of academics who feel bad about junior staff not being mentored and who decides to take them under their wings. But there is no formal document that stipulates how it needs to be done, when and how many reviews and how many reports. We do not have that. They are reviewing the developmental lecturer's policy and in that policy, there will be mentoring and coaching policy that is not yet approved*"*(Key Informant Interview_UKZN06, 2017).

5.10.2.2. The lack of coaching and mentoring capacity and experience

Interview participants from the two of the institutions (HU and UKZN) agreed that the lack of capacity, experience and wisdom of senior faculty members is among the major bottlenecks with respect to the practice of coaching and mentoring in the universities. One of the participants from HU pointed out that:

"Seniors are those committed to coach others. We have to say people with the highest academic rank. And some of our seniors still do not have ample experience in that regard. Many of them do not have the experience of international presentations and conference presentations. When you are a Ph.D. fellow, you can enjoy some privileges"(Key Informant Interview_HU10, 2017). This text indicated that there are limited opportunities for academic career advancement and growth at the institutional level, emanating from the lack of access to international networks and exposures.

Another respondent added that there are initiatives here and there in response to observable demands among the junior faculty members with the goal of engaging experienced and senior faculty members with those of novice lecturers who are new to the profession. Despite huge expectations, such an initiative is not really implemented in the context of HU. The respondent narrated that:

"One of the things I know is that we cluster teachers together so that they can share their experiences especially when the senior and junior cluster together. So there is such kind of arrangements. The issue of mentoring should, however, be more than that. What we have now is encouraging senior staff members to share their experience with Novis teachers. There has to be a special arrangement where senior teachers engage with Novis and new teachers. The arrangement is there but it is not realised as we see it now. We expect the senior staff members to develop a research problem and teaching in a way that they share their experience and support them but it is not so common. It is not a reality in our university" (Key Informant Interview_HU13, 2017).

However, at UKZN, in spite of the absence of the mentoring system, people are very busy and they really do not understand the positive impact of mentoring. The interview participant highlighted that the senior academic staff members might not have sufficient time to mentor the junior faculty members such as developmental lecturers. The respondent stated that:

"We have got developmental lecturers. We don't think that they have got sufficient time to mentor the developmental lecturers. The job is very challenging and there is no monitoring system to make sure if things are going in the right direction. Coaching and mentoring needs at different levels including senior professors. For instance, if you want to apply for NRF, you need to get information from the senior professors who have got the passion for sharing information. People are very busy and they really don't understand how impactful it is. Coaching and mentoring is not part and parcel of the academic performance. It only asks for academic leaders where it asks 'have you mentored junior academics in terms of research and teaching?" (Key Informant Interview_UKZN02, 2017).

5.10.3. Performance management practices

Performance management practices and the associated challenges were assessed to determine their contribution to staff retention in the university system. The findings revealed that the performance

management practices have multifaceted challenges across the three universities although the nature of the challenge varies between the universities in the two countries. Whereas the performance management system and practices at UKZN are stronger, those at the two Ethiopian universities (AAU and HU) are largely nominal and done for procedural consumption.

The universities in Ethiopia (particularly at Haramaya University) have faced multifaceted challenges with respect to the performance management practices. Some of the key challenges were the lack of a comprehensive policy framework to manage the process, dependence on limited information source and the lack of comprehensiveness (i.e. student lecture evaluation only), lack of linkage with incentive system, delayed feedback, the lack of seriousness in the management of the appraisal process, and the lack of capacity to differentiate between good and poor performers. Some of the key challenges are highlighted hereunder. The lack of differentiation between 'poor' and 'good' performers is another key challenge facing the system. One of the key informants highlighted that: "The staff is evaluated by their students. We have not given any reward for top-performing teachers but we gave it to the students. In addition to teaching, some of the staff members write proposals and win projects. The public knows these people but the university never rewarded those people. If we reward those good performers, others may follow suit and it has to be in place to change the culture of the university"(Key Informant Interview_HU09, 2017). From this, it is evident that the academic staff performance evaluation in the university is mostly done by the students and it rarely differentiates between poor and good performers. Another key informant from HU who is a senior professor attested that: "I cannot remember where in my performance was evaluated. It was the time when I have applied for promotion may be three years ago. I am not sure about my level of performance. There is no mechanism to differentiate between the bad performers and good performers. You toil to be somebody but others are doing nothing and getting the same salary as you do. I have to be recognized and others should be reprimanded in a way that it improves their performance" (Key Informant Interview_HU, 2017). From these statements it is clear that performance management is used in its true sense for the purpose of promotion only and its absence was perceived as a source of dissatisfaction among the good performers. An interview participant from HU added that the performance management system in the university lacks the capacity to differentiate between good and bad performers. The key informant briefly summarised his views, stating that: "The performance management system has no means to differentiate between the two (good and bad performers). There is no system to differentiate between these two groups of employees. It is only used for promotion purposes"(Key Informant Interview_HU07, 2017). Another participant from HU reiterated that the institutional incentive mechanism is lacking in rewarding good performing academic staff as opposed to the students, implying that the system does not differentiate between good and poor performers. He further indicated that: *"…*Students are awarded but not staff members because we don't have that for staff members.

What I hope is that they promote top performers and they do less with those poor performers"(Key Informant Interview_HU12, 2017).

The lack of comprehensiveness and dependence on a single source (i.e. student lecture evaluation only) for assessing the performance of academic staff is another key challenge facing the university which by implication compromises the quality of the performance outcome from the perspectives of validity and reliability. In this regard, some of the interview respondents from HU (12, 01, 02, 04 and 13) opined that the university relies on a limited information source for evaluating the performance of the academic staff. For instance, key informant (#12) stated that: "It is the very poor mechanism. For teaching, we have student evaluation but the rest are not there. We are moving towards all-rounded performance management system but not yet fully implemented"(Key Informant Interview _HU12, 2017). From this statement, it is evident that an all-rounded performance management system is lacking in the university system and only lecture evaluation by the students is institutionalised at the moment. In the same line of argument, one of the interview respondents from AAU indicated that the performance management system, particularly for academic staff, is very poor in that it does not provide sufficient information for further development. He further described that: "The performance management system is very poor. When you come to the academic staff, the evaluation is done only by students, your boss, and colleague. Even if you are doing, the academic staff is not provided timely feedback. It can't help to identify the weakness and strength. People only need it for promotion"(Key Informant Interview _AAU01, 2017).

A key informant from HU elaborated that: "The thing is we know who is who. Especially the heads of departments know who is who in their section. We get teachers evaluated at the end of the semester though that is not valid and reliable. Sometimes students give results based on their grades. We use the result for promotion. For salary increment, we will be using the performance evaluation as part of the implementation of the Balanced Scorecard System (BSC). HU has already procured a software system that will help to evaluate the performance of staff members. Other universities have implemented the BSC. Maybe we will know who is who quantitatively after the implementation of the BSC model. Until then we will rely on student feedback to understand the performance of the staff members. We have also the quality assurance expert at the college level and he is continuously monitoring the implementation of classes and he is always reporting to the dean and the associate dean. In the process, we know who is seriously doing his job or not and know the profile of our staff members"(Key Informant Interview _HU02, 2017). From this, it is evident that the performance management system at HU is rarely systematic and lacks data sufficiency to measure the actual performance of academic staff members, calling for the implementation of a fully-fledged system that is able to gather information from different sources to produce a performance result that is valid and reliable. Another key informant from the HU stated that *"...*there is no full-fledged performance

management practice in the university" (Key Informant Interview _HU01, 2017). Another interview respondent from HU further elaborated on the lack of comprehensiveness of the performance management practices at the university: ″The only thing we have is an evaluation of the staff by the students and we even don't have an evaluation of staff by the head of the department. We are thinking of constituting the peer and supervisory evaluation. Monitoring was the problem and the university has introduced new software and it will help us to monitor the performance of our staff. First, we have to cascade the work to the individual. Everyone will plan weekly and that will be visible by the person in the next hierarchy. Because of that, we couldn't deploy to evaluate the performance of the staff members. The student evaluation is also not fully functional. The result comes after a year and it is done for procedural consumption. There is a strong move by the management that this system should be implemented and it should be implemented aggressively. For the time being the evaluation focuses on teaching, but if one applies for promotion he/she should present the paper presented through conducting research. It accounts for the promotion process″(Key Informant Interview _HU04, 2017). Another key informant from HU highlighted that: "We have what we call Balanced Score Card (BSC) which is not properly implemented. In the academic wing, there are several ways of checking. We have the means to make sure that staffs are going to their class. One is that we move around and check. Second is that we have feedback club and representatives with the group and they give us lots of information regarding the performance of the staff. We also have a mechanism to evaluate the performance of the staff members to check if the staff members are doing their job. We also have an annual plan broken into quarterly plans. So we have to plan and report what we have done based on our plans″ (Key Informant Interview _HU, 2017).

The lack of linkage between performance outcome and incentives is another key challenge facing the university with respect to performance management. Despite the consistent performance assessment of the academic staff by the students every semester, the outcome is rarely related to the incentive system to motivate academic staff for further performance. One of the key informants elaborated that: ″The performance management is done consistently but not attached to incentives. If you look at academic staff, they are evaluated by students for the courses they have taught. The result is given for each staff but it is not comprehensive. Academic staff should be evaluated by the boss, peer, and the student. And this activity should be supported by softwares. It shouldn't be made manually because we have lots of staffs. Every staff members are evaluated every semester and hence enabling technologies should be employed. That need is already identified and addressed. Admin staffs are evaluated based on behavioural issues and it is not comprehensive. In both cases, it is not attached to incentives and it has to be addressed″(Key Informant Interview _HU05, 2017).

The interview participants at the South African university (UKZN), however, agreed on the existence of systematic performance management practices but they portrayed a mixed feeling on the

performance standards, citing that they are too strict and too high to attain given the overwhelming responsibilities discharged at various levels in the university system. One of the interview participants who is working at a deputy vice-chancellor level (DVC) disclosed, during the time of interview, that managing performance is a big issue in the context of UKZN. The key informant indicated that: ″Performance management system, assessments, and promotion have been a big issue, retirement (60 years here in UKZN whereas it is 65 years in other universities in South Africa) – we have strict retirement age and the question is how you qualify for superannuation – these are some of the challenges we are facing as an institution. These are some of the issues you find in addition to those I spoke about earlier such as the institutional culture and there was no collegial environment″ (Key Informant Interview _UKZN01, 2017). Another key informant from UKZN elaborated that: ″The performance management is good but it was put in place in a different context (old versus new conditions) was the context in which it was introduced. It was branded in a particular way and resisted. It was introduced within the context of that debate. Management made it compulsory for certain members. You are appraised only if you are in the new conditions of service. Employees in the old conditions of service only get benefits or apprised if and only if they go through the performance appraisal system. The context is the thing that is a problem in the case of UKZN. The performance management system is not designed only for a particular group of employees but for all. It has a broader aim or perspective, but due to the minor elements of the context became a problem at UKZN″(Key Informant Interview _UKZN04, 2017). Another interview participant from the same institution raised the issue of compliance in the past and stated that there has been an increasing rate of compliance in the performance management practices since 2015. The key informant further iterated that: ″We have the challenges of buy-in until 2015 when our compliance level started increasing. People have entered their performance agreements and twice reviewed per year. The system is matured. The buy-in was due to the distrust in the system and in management and unions were using that as a negotiating tool. The relationship has now improved and the trust is improved with the new DVC. As a result, there is an improved trust climate″ (Key Informant Interview _UKZN06, 2017).

5. 10.4. Reward and benefits structure

Payment is one of the key issues that influences academic staff's decision to depart from the institution. Analysis of the findings with the objective of assessing the context or practices of rewards and benefits across the three universities revealed that the reward and benefit structure at the two Ethiopian universities largely differs from UKZN. Three key issues were identified at the Ethiopian universities as opposed to UKZN: stagnant or static salary system, the lack of performance-driven recognition and reward system, and low level of salary compared to other industries and sister universities in the region.

5.10.4.1. Stagnant or static salary payment system

The salary scale of academics working in the publicly-owned Ethiopian higher learning institutions is more rigid and less flexible. Secondary sources revealed that the current average monthly salary scale or structure which was implemented a year ago ranges from ETB 5178 (approximately equivalent to 190 USD[7]) for academic staff working in the lowest echelon of the academic structure to ETB 20245 (approximately equivalent to 740 USD) for academic staff in the highest echelon of the academic ladder. As it stands now, academic staff working in these universities get salary increments on condition that they are promoted from one rank to another. In other words, a salary increment through the adoption of horizontal scales has not been implemented since unknown time. However, from the South African perspective, a monthly average remuneration paid to academics ranges from R26, 763.25 (approximately 2280 USD) for junior lecturers to R69, 314.00 (approximately 5904 USD) for professors working in the South African higher education sector (HESA, 2014). In the context of the South African universities, there is a significant change in the amount of pay on an annual basis whereas there is an intermittent salary adjustment which is mostly done at the country level in Ethiopian universities. One of the reasons attributed to the lack of salary increment at Ethiopian higher education is attributed to the lack of implementation of a horizontal salary increment. For instance, in Ethiopia, academic staff who have recently graduated from a university with a master's degree and appointed as a lecturer are eligible to get a salary equal to that of academic staff who have served in the same position for the last ten years. Most of the key informants argued that this phenomenon is seriously damaging the motivation of academic staff members which in turn may push them to think of departing from the university. It often leads to the dissatisfaction of academic staff. One of the key informants described the context as follows:

"For the academic, if you work or strive, you will get promoted. So whenever you work hard with the core activities …You will be rewarded and your reward will be a promotion. With promotion there comes salary adjustment. What about salary increment? It is a mystery we do not know. Somewhere up in the government system, the performance-based system is not implemented. A professor who is serving for 10 years does not have salary adjustment and get an equal salary with fresh one promoted to the rank of professor"(Key Informant Interview _HU06, 2017).

With the delay in the implementation of the horizontal salary scale in the universities, the majority of academics often feel that experience is not well-appreciated which often leads to dissatisfaction. The key informant stated his views as follows: "I don't see any challenge because I consider experience as an important thing to consider first of all. A Novis teacher is not the same as an experienced teacher

[7] The rate was computed today 23 March 23, 2018 with 1USD equals 27.39 Ethiopian Birr (ETB) whereas 1USD equals R11.74.

in terms of knowledge, understanding, and contribution. …I believe that their incentive should differ. They are equivalent and getting the same salary …I know that there are such kinds of packages and the scale is advertised. But they say that such packages should be put into practice if and only if staff performance is evaluated. In other places, experience is considered as an important element. I feel that one of the discouraging aspects of bringing experienced staff to the status of new staff is very discouraging. The salary paid to a new master's holder and the one who served in the same university for the last ten years gets the same salary…it is demoralising and discouraging" (Key Informant Interview_HU13, 2017).

The lack of implementation of the salary scale in higher education in Ethiopia for academic staff was delayed under the justification of the absence of a sound performance management system in the university landscape. The key informant described that: "The already approved salary structure for higher education instructors is not yet implemented. The university president (former) has been raising this issue on different meetings with the top officials and we have been informed that this scale (a new horizontal scale) will never be implemented unless the instructors' performance is evaluated"(Key Informant Interview_HU02, 2017). An interview participant from the same institution related to the implementation of the salary scale by instituting the balanced scorecard for evaluating the performance of academics. He noted that: "They were told in the meeting that they can't do that unless and otherwise the Balanced Score Card (BSC) is fully implemented. It is only after measuring their performance that they can provide them with a salary increment. Based on the functionality of the software, we are going to use the structure to benefit our staff members. Otherwise, it is not easy" (Key Informant Interview_HU04_2017).

Another key informant from the same university was of the opinion that the implementation of horizontal salary increment is vested in the university top management and its lack of implementation is, therefore, the outcome of the reluctance of the university leaders. He stated that: "Implementation of new salary scales (horizontal salary scales) - I think it is up to the universities' top management to implement this"(Key Informant Interview_HU01_2017).

The majority of the key informants from both universities in Ethiopia indicated they strongly believe that the salary scale has to be implemented, with the presumption that lack of implementation has a demotivating effect on the senior academics who have served the university for a long time. An academic who is holding a senior administrative position at AAU strongly believes that salary increment should be based on performance rather than based on mere experience for the overall growth and development of the university. He stated that: "We appreciate vertical growth, not horizontal growth. We don't appreciate that even if the work of the ministry is wrong because people need to be paid for the experience that they have – we don't see as a problem in our university. 'Publish or perish" is being included in the new university senate legislation but not yet implemented"(Key Informant

Interview_AAU03, 2017). An academic from HU challenged the notion of publish or perish on the ground that it is largely insanity to expect academics to publish more without providing opportunities for them to do research, which includes implementing an appropriate performance management framework and policies for its effective implementation. The key informant summarised his views, stating that: ″Publish or perish policy is not applicable in Haramaya University. Before implementing such policy, certain preconditions must be fulfilled. You cannot expect staff to publish without providing opportunities for staff to do research″(Key Informant Interview_HU05, 2017).

As it stands now, the salary payment system in Ethiopian public universities is neither based on seniority nor on performance. It rarely differentiates outstanding performance and rewards staff accordingly. Meritocracy is the missing element in the Ethiopian higher learning institutions amidst the stiff global competition for funds among students and academics. At UKZN, however, both horizontal and vertical salary adjustments are possible.

5.10.4.2. Performance-based recognition and rewards

A key informant from AAU expounded that there were no means in the past to recognise good performers officially. However, recently there have been positive developments aimed to recognise the contribution of the lead researchers who have written a winning project proposal and those that have attracted money to the university. Since the recent past, the university has started rewarding the lead researcher to the extent of 4% of the total grant as a strategy to motive the researcher for further engagement. The key informant explained that:

″In the previous, there is no ways of recognising good performers officially. But now roughly about 4% of the grant that comes to the university will be directly given to the lead researcher. This is one way of motivating the individuals. In the past, the university did not have a mechanism of motivating individuals. Now; the university has established awards such as the best teaching awards, research awards, community engagement awards, etc. About five categories of awards have been established in the university in an annual wise and we have a guideline. There is committee both at the university and college level″ (Key Informant Interview_AAU05, 2017). However, there is a lack of a performance-based reward and compensation system in the Ethiopian higher education landscape in general and at AAU in particular.

Another way of rewarding performance is through promotion. The promotion system allows academic staff to be compensated based on performance (teaching, research and community services). A key informant from HU strongly believes that pride is the one that drives promotion in the Ethiopian higher learning institutions in broader terms and at HU in particular because the amount of benefit gained

after the promotion is not significant and it is not motivating enough for one to pursue the position high in the ladder. The key informant described in detail that:

"Yes, we do have a promotion system. Staff members start at the graduate assistant and get promoted to the rank of full professor. This depends on the year of service and performance. Performance means teaching and research. Research is measured based on the number of publications. The point is what significant difference is there between the ranks…there is no much or significant difference between the existing rank and the next rank in the academic ladder in terms of benefits and pay. The salary difference is very minimal but for people does it only for pride"(Key Informant Interview_HU09, 2017).

5.10.4.3. Low salary

An interview participant from AAU felt deeply that the academic staff members including the support staff are not well-remunerated and to the worst they are underpaid. The informant explained this situation as follows:

"No, they are not remunerated to be precise...It is not only the academic staff but also the support staff are underpaid. Once upon a time I was singing salary and usually, I don't see the amount but I do happen to see one day and the amount written there was beyond my imagination and it is sometimes difficult to expect output knowing that they are earning that amount. It is very low"(Key Informant Interview_AAU07, 2017).

Analysis of the findings revealed that academics in the Ethiopian higher education landscape are rarely capable of borrowing money from financial institutions to own estate and physical properties due to their salary level which is extremely low compared to what the industry pays and the salary level of sister universities in the neighboring countries. One of the participants in the highest academic rank and the higher administrative position indicated that the university has tried to 'connect' the academic staff with the bank so that they can borrow money to own properties. However, the exercise was futile as there is a huge gap between what the bank expects as an instalment and the academic staff's salary level. He further indicated that:

"We have already attempted such staff retention mechanism. But the salary amount and the money one wants to borrow from the bank does not match. There is a mismatch between what the staffs get and what the staff wants as a loan. It was not attractive. Nobody worries about HU. Now there are a lot of universities. If the universities do not have the means to survive, there is no problem other universities can survive. The government housing system should be expanded. The transportation system should be facilitated. Overload payment issues, we can improve that and provide this and the guideline was approved by the board but it may not satisfy the demand of our staff. The expectation

from the staff is so huge and we don't think that we fulfil this demand"(Key Informant Interview_HU06, 2017).

Contrary to the above three key challenges facing Ethiopian higher education with respect to the rewards and salary structure, the situation at UKZN, however, largely differs as there are both horizontal and vertical salary structures which are practically implemented. At UKZN, in addition to the salary structure, academic staff get a bonus per annum in accordance with their salary scale and based on the performance appraisal result (hence it is performance driven as opposed to what is being practised in the Ethiopian higher education context). On top of that, academic staff receive annual pay progression, as stated "Salary scale is there. There are two things that come with the performance appraisal result: one is the bonus. If you get more than three out of four, you qualify for bonus annually based on the amount of your salary and the amount the university is willing to pay per annum. You also get an annual pay progression – you progress to the next level annually"(Key Informant Interview_UKZN04, 2017). The other peculiar characteristics of rewards and benefits structure at UKZN are that they are based on the conditions of service. The interview participant stated that: "The salary package is this. You get the benefit packages on the conditions of service"(Key Informant Interview_UKZN06, 2017).

In summary, whereas the salary level at UKZN is largely differentiated, negotiable, performance-driven, flexible and dynamic depending on the level of education, experience, and expertise of the academic staff, the salary structure across Ethiopian public universities is largely rigid, levelled and static despite variation in performance across the academic staff and the changing socio-economic context of the country.

5.10.5. Training and development

A key informant who held a vice president position at the time of interview at HU witnessed that there is indeed a certain level of human capital development practices in the university despite the lack of integrated and a fully-fledged human capital development policy framework/guideline. He noted that:

"Of course there are different need based training programs in the university. We usually give training on proposal write-up, paper write-up, data analysis, geographic information system and remote sensing, calibration of instruments in laboratory, surgical trainings to our staff or surgery, how to handle cases and many more as I cannot remember specific facts in this regard"(Key Informant Interview_HU01, 2017). One of the key informants from HU opined that the university follows two major strategies for long-term staff development. He noted that: "When it comes to the formal training. We have two types of formal training. Staffs can find their own scholarship and we encourage. If they secure the scholarship, we automatically release them from work. The second type is that we request

staff members to fill the staff development plan which is to be submitted to the Ministry of Education and the ministry assigns these staff members to different universities in the country and that is how we are developing our staff members″(Key Informant Interview_HU02, 2017). Further analysis of the texts obtained via interview revealed that the university capacitates its academic staff members through the development of in-house degree programmes such as the higher diploma programme (HDP) which is aimed at enhancing the pedagogical skills of academics working at various levels. The training is given to academics of all ranks including senior professors and the duration is one year. The interview participant summarised his views as follows:

″The other thing is there is an additional training such as higher degree program (HDP) which is one-year diploma program and all our staff has gone through the training. And the other one is at least once in a year we have social gatherings or get together. It is thanksgiving day for our staff and we talk and discuss some issues. It will be recorded and documented″(Key Informant Interview_HU04, 2017).

Such activities are used as a moment of checking and re-checking oneself in terms of achievement and performance which further contributes to the development of the college as well as departments and individual academic staff members during the discussion.

The other area of training and development is aimed at research skills development. According to the interview participants from HU, the university engages experts according to their area of specialisation and offers specific skill-based training to academic staff members at various levels with the goal of enhancing their research skills. The interview participant noted that:

″Training on research skills development – we give training on scientific writing, data management, and research methodology. In terms of scientific writing, we invited staff who does have data and once they are through the training they will be able to publish. Some of the staff members have actually published their data in the reputable journals″*(*Key Informant Interview_ HU09, 2017).

One of the key informants, however, questioned the availability of well-planned, long-term and integrated training and development programmes despite the existence of short-term training organised here and there in the university. He noted that: ″We organize short-term training both national and international. We don't have planned training programs″(Key Informant Interview_HU, 2017).

It appears that most of comments on training and development challenges were from HU key informants. The training and development as HRM practices rarely take place and are not well-structured in the university system. If it does take place, the job is done in a disintegrated or dispersed fashion. The needs assessment is not properly done. This lack of identifying the training needs or skill gaps may be related to the lack of a sound and integrated performance management system. In addition,

none of the key informants from the two of the universities (AAU and UKZN) commented on the training and development practices at their respective universities.

5.10.6. Opportunities for career advancement

The availability of prospects for career progress is one of the reasons why employees decide to remain within an organisation. The findings revealed that there is an opportunity for promotion at HU despite the criteria which are becoming more and more stringent than in the past which may likely discourage academic staff to pursue the route. In this respect, one of the key informants from HU highlighted that the promotion system in the university is getting tough: ″Now it becomes very though. Actually now continuing the next education level has got support from the government as well as the university. But when we look at for example promoting to the next rank by doing research publications and community services and so on, the steps are becoming more and more stringent. The quality of the paper is in question. It is difficult but it should be of quality. In order to make sure that the staff members publish on reputable journals, the university has put in place a policy guideline on how to evaluate the promotion process in the university″(Key Informant Interview_HU01, 2017). Another interview participant from the same university indicated that: ″The career development is there both through training and self-professional development. Some staff do research and publish and get a promotion to assistant professors, associate professor, and full professor. When such request comes, we automatically forward it to the university senate. Despite the lengthy process during the promotion, the recognition is made on the day it was approved by the college council″(Key informant interview_HU02, 2017).

5.10.7. Recruitment and selection practices

Staffing is among the key HRM practices and it is a gateway for an employee into the organisational ecosystem. A key informant from HU witnessed that there is a relatively strong procedure for recruiting academic staff members. He noted that:

″There is a college recruitment committee consisting of the dean, departments and HR departments. The recruitment is normally done orally. In fact, we have a guideline to recruit staff member developed by the AVP office. We use that guideline. We also want them to do presentations. We see if they are able to deliver. The presentation is for masters holders and above including Ph.D. holders but we have recruited Indian staff members and they are 8 in the college. We don’t have Graduate Assistants (GAs) but we have Technical Assistants (TAs). We don’t make them present but we ask them technical questions. After they get educated and trained, they tend to look for jobs in other universities. They are treated like admin staff and they are not allowed to get overtime pay like the academic staff. The good part is that we give them the education to continue and that is how we try our best to retain

them″(Key Informant Interview _HU04, 2017). Another key informant from the same university argued that there is a certain level of interference by the higher education governing body (i.e., Ministry of Education) so that the liberty and autonomy of the university were compromised to a certain level in recent years. The key informant argued that the employment was exclusively done by the universities in the past. The outcome is that there is a lack of proper integration between those being hired by the university and those being hired by the Ministry of Education of Ethiopia. The key informant summarised his views as follows:

″I have been the dean of the college six-seven years ago. I remember how we were hiring. By then the MOE has nothing to do with the intervention of the MOE. What I can see is that there is a certain level of interference by the MOE. Universities should have a complete liberty on how to employ their staff as far as the required level of transparency is kept. Now, it does seem that the liberty is gone. The liberty should be given to the departments. If you send someone whom they don't know, it will create a problem. If you want to make a university, the departments need to have a complete liberty to hire someone that qualifies for the job and able to deliver″(Key Informant Interview_HU11, 2017).

The same thing applies to the recruitment of developmental lecturers and in South Africa, for example, there is a grace period of five years to earn a PhD degree before being allowed to become a lecturer at the South African universities, including UKZN.

5.10.8. Communication system in the organisation

Communication is a lubricant in an organisation that helps to ensure the free flow of information within the organisation. Organisations differ in the kind of communication system they employ and that determines their effectiveness and efficiency. In this respect, key informants from HU (#1, 2, 3 and 11) commented on the communication system adopted at their university. The findings showed that the communication system in the university is largely classical and paper-based which is due to a number of reasons. As a result, there is an absence of smooth flow of information within the university system. Employees in the system may not be equally informed about some of the important issues regarding the university system. In this respect, a key informant from HU stated that: ″The chain of command is not clear. There is a duplication of effort. When people leave offices, usually that is not communicated to other sister colleges and departments. Personally, I have the personality to communicate with anyone in the university″(Key Informant Interview_HU01, 2017).

Another key informant from the same university (#2) indicated that there is a slight improvement in the way information is disseminated across the universities despite the way it was in the past which was largely manual and as a result, some people missed critical information. The key informant noted that:

"I think the communication is good as most of the things become electronic. Messages from the Ministry of Education (MOE) and others come directly through the vice presidents and the president. Projects and call for papers all come through emails and electronically. I forward the messages to all staff members and advice all heads of departments and schools to do the same. The rest of the information is posted on the notice board. During the early periods, scholarships come after they are passed due to delay in communications. The communication system is more or less improving with the advent of ICT"(Key Informant Interview_HU, 2017).

Key informant (#3) supported the idea of the key informant (#2) in that there is a positive development in the culture of using an electronic communication system in the university despite the lack of reliable internet connections and lack of cutting edge ICT infrastructure. The key informant mentioned that: "There is good practice on progress and that remains to be seen. It thinks nowadays the culture of using electronic communication is growing and I hope will get to the possible optimum level"(Key Informant Interview _HU03, 2017).

However, another key informant from the same university (#11) who has served for many years and been working in various administrative positions as an associate professor said that the communication system in the university is largely conventional and virtual communication is lacking in the system to the extent it is needed. According to him:

"I personally knock every door to get my job well done. That is personal. But as a system, I think it is okay but we are still conventional. You can see some scholarship and postdoctoral issues and you are not always in the office. This age is the age of information technology …we should be able to communicate virtually with anyone in the world... We don't see that thing. If you are not in office there is a possibility that you miss something important to you…the scheme of communication is not yet up-to-date. We have institutional email but we don't use it. The system is not effectively working"(Key Informant Interview_HU11, 2017).

5.11. SUMMARY

This chapter has discussed a variety of problems based on information gathered through the questionnaires and the face-to-face interviews.

The data analysis began with the description of biographic information followed by analysis of quantitative data obtained through a survey of 596 faculty members across the three institutions and analysis of qualitative information obtained from 29 key informants across the three universities.

The findings have shown that the majority of the participants of the survey questionnaire were men, more than 50% of respondents were below the age of 40 with close to 40%being between the ages of

30 to 39 years; the majority of the respondents were from AAU followed by HU; nationality-wise, a significant number of them were Ethiopians followed by South Africans; more than 50% of the respondents had less than six years of experience; in terms of educational level, more than 50% of them had master's degrees; a significant number of the respondents were lecturers having permanent positions; many of the respondents were paid less than R7000 (approximately); most of the respondents were married; and lastly, a significant number of the respondents have science, technology, and engineering as their fields of specialisation.

Further analysis of the effect of selected demographic factors and related variables on the academic staff's propensity to either remain at, or depart from, the three institutions has shown that, among others, age, educational status, academic rank, employment status, family/marital status, areas of specialisation and income are partially and statistically influential in the academic staff members' intentions to either remain at, or depart from, the two Ethiopian universities. At AAU only three demographic variables, namely age, educational attainment and employment status significantly predicted turnover intentions. Similarly, a relatively large number of demographic variables including age, educational attainment, academic rank, marital status and field of specialisation have significantly and statistically predicted the academic staff's intention to either remain at or depart from HU. Contrary to the first two universities under consideration, the findings from UKZN have shown that none of the demographic variables statistically and significantly predicted the academic staff's turnover intentions.

In addition, analysis of quantitative data aimed at measuring the effect of selected organisational variables such as QWL, OJ, JS, LMX, R&B and OCB on the academic staff's intentions to remain at or depart from their university. The analysis, using inferential statistics such as structural equation modelling, revealed that only job-related characteristics of the QWL_JC, OJ_PJ and R&B dimensions of the antecedents of academic staff's intention to depart were proved to be significant for AAU. When compared across the three latent variables which were identified to influence the intentions of the academic staff to depart from their institutions, relatively speaking, procedural justice's influence was higher. For instance, it was evident that an increase in the perception of academic staff regarding procedural justice within the university decreases academic staff intention to leave by 18.5%, whereas an increase in the perception of QWL of the faculty members in the university has the tendency to reduce their intention to depart from the university by 17.6%. However, with respect to the overall satisfaction of the academic staff with respect to the rewards and benefits, an increase in the positive perception of the faculty members regarding the rewards and benefits decreases the academic staff intention to leave by 15.4%. In addition, two of the antecedents were found to be slightly significant. These were the altruism dimension of organisational citizenship behaviour (OCB_A) (β=.113; P=.064) and job satisfaction (JS) (β=.207; P=.051). The rest of the latent variables did not predict the academic

staff propensity to depart at AAU. However, at HU a path analysis revealed that three latent variables including the job characteristics dimension of QWL (β=-0.283; P=0.015), LMX (β=-0.290; P=0.009) and R&B (β=-0.280; P=0.002) significantly influenced academic staff propensity to depart from the university whereas the rest did not. Lastly, at UKZN, out of the six paths, the R&B and IL is the significant path with (β=-.304, P=.020). The negative value tells that a unit increase in R&B leads a certain unit decrease in IL (propensity to depart). Thus, rewards and benefits (R&B) negatively and significantly influence academic staff intention to leave at UKZN and the result revealed that the remuneration package seems the most important factor for UKZN staff. In addition, OCB PIRIH has a slightly significant negative influence on academic staff propensity to depart from UKZN though the p-value is greater than .05. Yet, it can be reasonably argued that OCB PIRIH can also slightly negatively influence academic staff's intention to leave at UKZN.

The findings based on the qualitative analysis of information obtained through 29 key informants (10 from AAU, 13 from HU and 6 from UKZN) solicited from the three case study universities have identified key challenges facing the higher education sector, evaluated the extent of vulnerability of higher learning institutions to brain drain and the existing and anticipated characteristics of academic mobility, the perceived causes of academic brain drain across the three universities, the challenges facing the institutions in measuring the magnitude of brain drain, and strategies (existing and anticipated) followed by the universities to retain their qualified academic staff members. The following chapter presents the results of the study.

CHAPTER SIX

EXPLANATION OF FINDINGS

6.1. INTRODUCTION

This chapter provides an explanation of the results reported in the previous chapter (Chapter 5). The explanation of the results is based on the key findings of the research. The chapter also relates the key findings to previous literature and the objectives of the study

6.2. STATE, CHALLENGES, AND CONSTRAINTS OF HIGHER EDUCATION

The findings of the results obtained through analysis of qualitative information revealed that the tertiary education sub-sector in general and the specific institutions in Ethiopia and South Africa in particular are faced with multi-faceted challenges and constraints. The challenges are discussed next with respect to the specific universities.

6.2.1. State, challenges and constraints facing Ethiopian universities: The case study of AAU and HU

Higher education today is operating in a dynamic environment. The context within which the sub-sector operates is changing from time to time. A qualitative study with the objective of investigating the key challenges facing the Ethiopian higher education sub-sector, involving the two largest and oldest universities in Ethiopia (AAU and HU), revealed that there are common trends manifested in the two universities. Whereas AAU is located in the metropolitan city of Addis Ababa and the first university in the country, HU is located in the eastern part of Ethiopia about 526km away from Addis Ababa. Historically, at its inception, HU was one of the colleges of Addis Ababa University which later grew into a fully-fledged agricultural college.

Analysis of the findings via the face-to-face interviews with ten key informants from AAU revealed that some of the key challenges facing the university are related to staffing, resources and infrastructure, funding, research involvement and engagement, the teaching-learning (curriculum implementation and relevance), quality of education, language policy, education system and standardisation, and finally governance and leadership. In the same manner, the findings from HU based on the analysis of data obtained from 13 key informants revealed that that the challenges were with staffing, resource and infrastructure, funding, research intensification, teaching-learning (curriculum implementation, delivery and relevance), quality of education, language policy, massification or mass enrolment, physical location of the university and finally leadership and governance. These findings are consistent with past studies on the Ethiopian higher education sub-sector, particularly those which highlighted that the sub-sector is faced a with multitude of challenges

such as staffing (Rita Van Deuren, Kahsu, Ali, & Woldie, 2013; Yizengaw, 2008), poor physical facilities and infrastructure for both students and academics (Yizengaw, 2008), financial constraints (Deuren et al., 2016; Teferra, 2013; Munyua, Abate, Huka, & Dawe, 2011; Yizengaw, 2008; Saint, 2004), deteriorating quality of life of academics (Semela & Ayalew, 2008), quality and relevance challenges (Rita Van Deuren et al., 2013; Reisberg & Rumbley, 2010; Yizengaw, 2008), governance, leadership and management-related challenges (Melu, 2016; Rita Van Deuren et al., 2013; Yizengaw, 2008), teaching and learning (Rita Van Deuren et al., 2013), weak research and innovation capacities (Yizengaw, 2008) and the inability to meet increasing demands from access and inequity (Yizengaw, 2008). A working paper presented at a conference organised by the collaborative efforts of the Ethiopian Strategy Centre (ESC) and Maastricht School of Management (MSM) under the theme "Higher Education for Development" held in Addis Ababa, Ethiopia between 23-14 July 2015 supports the findings that the Ethiopian higher education sub-sector faces numerous challenges including "shortage of funding, shortage of qualified staff, programs lacking labour market relevance, limited research and community service output, gender issues and lack of adequate quality assurance" (Rita van Deuren, Abay, & Mohammed, 2015;p.1). This implies that Ethiopian higher education in general and the three institutions of the study, in particular, are faced with a multitude of challenges that render the attention of policymakers to approach the problem using a systems approach.

6.2.2. State, challenges and constraints facing South African universities: The Case study of UKZN

The findings obtained via six key informants from UKZN revealed that the university is faced with the following key challenges: HRM-related challenges, resource and infrastructure, funding, research intensification, teaching-learning (curriculum implementation, delivery, and relevance), quality of education, educational system and standardisation, leadership and governance and access to higher education by the citizens.

6.2.2.1. Human resource management related challenges

Human capital plays a critical role in the survival, competitiveness, and sustainability of institutions more than any other resources as it is the source of innovation and creativity. The key challenges identified with respect to human resource management at UKZN was mainly related to the inability to retain highly qualified and skilled academics and research scholars due to poor pay compared to what the industry pays for employees having comparable or fewer skills. A recent study by Maharaj (2016) argued that South Africa is encountering critical skills and staffing deficiencies locally in terms of science, engineering, and agriculture which has forced the country to adopt the dependence on expatriate staff as a strategy to overcome the challenge. The issue of staffing has been widely discussed by some researchers in the context of South Africa, including Ajadi (2016) and Masango and Mpofu

(2013) who identified retention as one of the main bottlenecks encountered by the South African higher education ecosystem, with no exception to UKZN. Another study, using empirical data, also found that during the period 1998-2000 South African higher learning institutions lost a total of 206 academics of which the majority were white (78.6%) (162) and 48% (100) were female (Netswera, Rankhumise, & Mavundla, 2005). One of the possible reasons for the decision of academic staff to either stay or leave was attributed to the perception of academics towards discriminatory practices emanating from racial intolerance, economic relevance and sense of purpose, salaries and other benefits, work environment, institutional track record and growth potential, management and governance staff development and promotion, and external environment (Netswera, Rankhumise, & Mavundla, 2005).

Another challenge related to human resource management was that of staff development. In order to survive and remain competitive and visible in an era of an ever-changing macro environment and microenvironment, adaptability is among the main strategies that higher learning institutions must adopt which involves skilling academics so that they are able to prepare a generation that is relevant in the future of work. It requires universities to take the matter (i.e. staff training and development) seriously in order to execute the jobs in more creative and innovative ways. This job must move beyond training academics to acquire a PhD, which is improving from time to time (UKZN, 2016). Instead, it has to do with assisting them so that they will be able to adapt to an ever-changing and dynamic environment to produce a generation that is relevant to the labour market.

6.2.2.2. Resource and infrastructure

Another bottleneck affecting the performance of higher learning institutions is the lack or the existence of limited facilities and infrastructure for all the stakeholders. With an increasing student enrolment, space and facilities are becoming a critical challenge in most of the African universities and this trend is far from improvement in the coming years due to the explosion of the younger population in the continent seeking access to higher learning institutions. The reality in most of the African universities is that they are obliged to serve a large number of students with existing facilities already limited in terms of classrooms, office facilities, laboratory facilities, library facilities, computer laboratories and university compounds. Analysis of the findings revealed that there is a missing link between the curriculums and state of the art/cutting edge technologies for the university to produce graduates that are relevant to the labour market amidst a changing working context due to the advancement of technologies. An empirical finding supports this notion that in most of the South African Development Community (SADC) states, ICT resources are scarce or virtually non-existent in SSA universities, with 80% of the region's higher learning institutions not adequately connected (Mutula, 2009). It can be also noted that UKZN is in a relatively better standing in terms of facilities and infrastructure as opposed to the two Ethiopian universities which are facing critical challenges. Yet, the increased

number of the student population as a response to enhanced demand for access to higher learning institutions has serious repercussions on the delivery of quality education and the production of quality graduates from the university.

6.2.2.3. Funding challenges

Funding is another area of interest impacting the African higher learning institutions landscape in general and that of South Africa in particular. The findings based on qualitative data revealed that there is a lack of sufficient financial resources that commensurate with massification of tertiary education at UKZN in particular and the South African tertiary education landscape in general. The interview respondent from UKZN, who is a full professor and among the top productive research scholars in the university raised a pertinent question that: “How do we meet massification and at the same time ensure good quality HE within the financial constraint that we have in the country is the question? And that is not easy to sort out". Many scholars support the fact that African higher learning institutions are financially constrained due to their economic standing compared to the global north. In this respect, Teferra (2013), a prominent scholar in higher education argued that although many countries are already committing quite a large sum of their national budget to education and a sizable (disproportionate) amount of this to tertiary education, the sub-sector in SSA is characterised by inadequate funding or financing. In the context of South Africa, which is in a relatively better economic standing compared to the rest of SSA countries, the situation became intense with an increasing demand by the student population for free education which was ratified by the former President of South Africa, Jacob Zuma, by the end of 2017.

The situation was described by one of the key informants from UKZN as follows: "Clearly highlighted by the current atmosphere raised by student government in higher education – ‘fees must fall’ and ‘free higher education’ especially in relation to student funding- there is no much funding to finance student fees. Young and youth are unemployed and everyone wants to enter universities and there is a challenge in having access to higher education- student funding". The target of doing more with less is one of the critical challenges facing most South African universities (Tilak, 2011). In terms of income diversification, the South African universities raise funds from three sources such as student fees, the government, and the private/non-profit organisations.

6.2.2.4. Research intensification

Most of the African universities can mainly be categorised either as a majority teaching university or a hybrid of teaching and research institutions. The involvement of academics in the research activities is largely determined by the identity, policies and research culture of the university where they are working. Scholars in the area have pinpointed four major related blockades to research productivity in

the South African higher education sub-sector, including “inadequate academic remuneration and onerous working conditions; the tension that seems to have emerged between advancing equity and realising academic excellence; obstacles that undermine institutional collaboration within the higher education and science council sectors, and the poor quality of senior managers in the knowledge system” (Habib & Morrow, 2007, p.113). Moreover, a report on the assessment of the institutions’ research output revealed that the Weighted Research Per Capita Output (which was computed as publication output units per permanent academic staff member) was found to have increased from 1.61 in 2014 to 1.68 in 2015 (DHET, 2016, 2017). Further analysis has shown that the per capita output across South African institutions increased, albeit at a slow pace, from 0.51 in 2006 to 0.88 in 2015 (DHET, 2017). Thus, one may argue that the perception of the ‘tendency of declining engagement’ in research among academics in UKZN was not justifiable vis-à-vis the existing empirical evidence indicating that the per capita output at UKZN has improved from 1.27 in 2014 to 1.31 in 2015. Yet, it is risky to conclude that the research engagement by academics has been consistently increasing among all permanent academic staff members as some of the research output could be produced by a few highly productive academics. It can be safely argued that the evident increasing trend at UKZN may also be attributed to the exceptional contribution of the few, but highly productive academics, calling for a differential approach to their retention and extensive development of young academics under their umbrella and their wings. One can also argue that the sustainability in the research output at all levels is dependent on the larger macro eco system of South Africa with an exorbitant number of highly productive expatriate academics susceptible to departure upon the changing socio-economic and political context of South Africa. Furthermore, with the growing number of aging academics (Teferra, 2016) who are presumably the largest contributors to the research productivity places the issue of sustainability at the top of the agenda for UKZN in particular and South African higher education in general.

6.2.2.5. Teaching-learning

Among the key challenges with respect to the teaching-learning is the lack of congruence between what the universities are producing and what the labour market absorbs or needs. This situation applies to most of the South African universities, without exceptions to UKZN. Repeating one of the quotes by the interview respondent: "Employment situation is a problem- the lack of matching or lack of congruence or lack of interplay between what the universities are producing and what the labour market needs- and it all emanates from the supply chain (starting from primary education) - the university is producing something that the labour market is not appreciating and in a way it is putting a fire to an oil of unemployment- universities are accelerating unemployment. Higher education supply chain management should be the way forward in an attempt to create entrepreneurial universities in an attempt to equip the graduates for the 4th industrial revolution". This statement implies that the higher

education sub-sector is either losing focus or lagging behind the 'wave of change' originating from technological development happening elsewhere in the world. This phenomenon largely jeopardises the significance of tertiary education in the society. The key informant noted that: "the ways our students are taught rarely prepare them to become entrepreneurs and to face the future challenges of the labor markets" emphasising the lack of integration of technology for the effective implementation of the curriculum. At this juncture, it can be safely argued that despite the fact that the university has taken some positive initiatives in the new strategic planning to align the curriculum with the job demands and markets through the engagement of all the stakeholders, the alignment so far has not taken good shape in terms of meeting the market needs. Some argue that African higher learning institutions, in general, are aggravating the unemployment situation by producing unemployable graduates. A recent report conducted in South Africa under the title "South Africa's Education Crisis: The quality of education in South Africa 1994-2011" highlighted that the number of unemployed youth between 18 and 24 with tertiary qualifications comprise significant proportion in the South African unemployed labour market (Spaull, 2013)

In addition, the teaching-learning rarely addresses the third mission (i.e. community service or engagement) in the higher education. The key informant emphasised that: "We need a long-term sustainable kind of project and activities that change the livelihood of the community. We need a long-term sustainable kind of engagement with the community that shows impacts on the life of the society. That is one of the things that need to be reconsidered and looked at to improve and enhance in the future". The relevance of higher learning institutions can be seen through its impact on the livelihood of the society.

6.2.2.6. Quality of education

Although there is a lack of universal agreement on the concept of quality of education or sometimes called quality education, it has become one of the top agenda items in the 21st century among bilateral institutions, state governments, employers and tertiary education leaders across the globe. In response to the higher education quality concern, most of the nation states particularly in the SSA have started constituting a formal and an independent quality assurance system to ensure educational quality and relevance (e.g., Higher Education Relevance and Quality Agency (HERQA) of Ethiopia established in 2003, and the Council on Higher Education (CHE) in South Africa established in May 1998). Some of the key forces contributing to the quality concern in higher education were "massification of education, greater diversity in terms of program provision and student types, matching programs to labour market needs, shrinking resources, heightened accountability and indirect steering of higher education" (Kahsay, 2012, p.17). It can be said that giving due attention to the quality of education has paramount importance for the respective nations and beyond as it has a direct effect on the safety, health, and livelihood of the larger society. In this respect, analysis of qualitative data obtained through

face-to-face interviews with UKZN staff revealed that quality of education is one of the key challenge facing the university in particular and the sub-sector in general. The key informant noted: "Quality of education- is deteriorating". The challenge could have emanated from massification of higher education with the limited resources (e.g. financial, human and infrastructure). Past studies raised the same issue quite often and factored out some of the factors that might have contributed to this phenomenon, such as "overcrowded and deteriorating physical facilities, limited and obsolete library resources, insufficient equipment and instructional materials, out-dated curricula, unqualified teaching staff, poorly prepared secondary students, and an absence of academic rigor and systematic evaluation of performance, lack of access to the global knowledge pool and the international academic environment"(Yizengaw, 2008;p.10).

6.2.2.7. System and standardisation

No higher education in the world is immune to changes and transformations (Mapesela & Hay, 2006). Higher learning institutions are encountering continuous changes and updates across the sub-sector in response to the changing macro environment such as socio-economic, political and technological development. The changes have had practical implications including 'recurriculation' and standardisation in the context of South African higher education institutions (Singh, 2015;p.3). There is a widely accepted norm in society that anyone who is a university graduate can be employed and thus families are doing their best to send their youth to universities. However, this may not always be the case particularly in Africa where the number of graduates exceed the number of jobs opening up in the labour market because of a struggling economy in most African countries. At UKZN, one of the respondents suggested the need to relook the sentiment "…towards university or professional degree by the mass" justifying that: "… In any healthy system of higher education, not everyone should be seeing the university as the kind of level of Higher education they need to attain. For instance, in Germany, very few students go to university and the majority of them go to vocational training so you train to become architects and technicians. And lots of them in the economy and very few with university qualifications in the economy and as a result, the economy is very successful because it's a kind of driven by the needs of services and so forth. Whereas in South Africa what we tend to find is everyone believes that they should be going to university and the only type they can have good living in the job is if they have a profession (degree profession) but what the country truly needs is more of architects and technicians". This statement implies that the very essence of tertiary education and the perception of the society towards a professional degree has to be addressed as a strategy to minimise unemployment in the economy, though contrary to the widely accepted notion among many scholars and bilateral organisations that universities contribute to the socio-economic, political and technological progress of the nation states (Yizengaw, 2008). The idea goes in line with the early policies of bilateral organisations such as the World Bank and International Monetary Fund (IMF)

towards African higher education that made African governments rechannel most of the resources to a lower level of education, abandoning the higher education sub-sector (Teferra, 2013; Tilak, 2011). Yet some argue that despite the renewed acknowledgment of the importance of higher education for development McCowan (2014), there are grim apprehensions about the capacity and competence of Africa's universities to produce graduates who can move the continent forward.

The other key finding with respect to the tertiary education system was the lack of preparedness both on the side of the students, academics and the university in general to face the changing nature and context of work. The current system rarely prepares students for the future. The interview participants further noted that: "Students are in the old mindset of enrolling in universities and getting degrees. Routine jobs are going to be taken by robots and we need to think of how we can equip our students with medium to top level skills that makes them cope with this new environment and conditions. I think education across the world needs to change. Every country has their own specific challenges. We don't really look at the impact of what we are teaching. We need to really sit down and think about what we are teaching and how we are teaching to prepare our students for the future". This statement invites one to re-examine the higher education system for a leap change and transformations particularly through the adoption of ICT. This calls for the establishment of incubating centres for promoting entrepreneurial skills and mover from theoretical-based teaching to more practical-oriented approaches so that the skills, knowledge, and behaviour acquired by the students can be relevant to the employers in the economy. In brief, the statement implies that the university system needs to evolve into an entrepreneurial university system to remain competitive and relevant to the economy.

The finding, thus, brings two fundamental issues to the table for further scrutiny and its feasibility needs to be examined in the future. Firstly, the finding revealed that there has to be a change in the perceptions of the society towards professional degrees. This suggests that it is not healthy for every society to seek higher education degrees as the labour market in Africa, in particular, is not ready to accommodate such an influx of graduates and hence expansion of vocational training institutes has to be a way for Africa to address the unemployment situation in the continent. This idea goes hand in hand with past studies that argued that tertiary education in Africa is increasing the burden of unemployment instead of solving it. The second idea from the findings suggested for the university to re-look the way it is preparing graduates for the future. The reality on the ground shows that higher education is booming in the SSA and South Africa per se. For example, student enrolment increased from 2,344,000 in 2000 to 5,228,000 in 2010 (McCowan, 2014). The enrolment rate remained the lowest (at 7%) despite its expansion over the last 40 years at a rate of twice the global rate which is 29% at the moment (McCowan, 2014).

6.2.2.8. Governance and leadership

With the development of tertiary education in Africa, there is mounting concern among scholars over leadership and governance of higher learning institutions in Africa which largely has a shortage of highly qualified faculty staff to execute university mission (Teferra, 2016). In the context of UKZN, there is a huge gap in terms of the university's contribution to the society apart from the teaching-learning and research engagement. The findings revealed that one of the key challenges in this regard is related to "managing people and getting the harmony of people working together" as many people prefer to work in silos, lacking interconnectedness among academics and researchers crossing disciplinary boundaries. Establishing an interlinked system among disciplines in the university is among the key challenges facing the higher education sub-sector and UKZN in particular which largely limits its capacity to contribute to the community and that largely hampers its visibility in changing the lives of the poor at the grassroots level.

6.2.2.9. Access

Access is a political imperative in the context of South Africa with the objective to "redress past inequalities and to transform the higher education system" (Spaull, 2013). As a result, post-apartheid South Africa is characterised by a considerably expanded student enrolment. For instance, the total student enrolment in the system in 1994 was 425,000 with a figure growing from 761,000 students in 2007 to 837,779 in 2009 to 953,000 in 2014 (DHET 2015) – about 20% enrolment rate (Teferra, 2016). Despite such an increase in enrolments, the issue of access to higher education has remained among the bottlenecks impacting South African higher education and has remained one of the areas of contention among politicians, academics, social activities, and the student community. One of the key informants attributed the challenge to the lack of resources on the side of the families to send their children to the university, as stated herewith: "Because of 'injustice' of the past, the families of those who are vulnerable have no financial resources to have access to the higher education". This statement goes hand in hand with the global development where university education is argued to be limited to elites in the SSA region where only 38 percent of enrolment is female and a significant inequality is evident across various social strata, preventing vibrant students from having access to university education (McCowan, 2014) and with the manifested highest rate of outbound student mobility leading to a significant risk of brain drain (McCowan, 2014). Taking the setting of South Africa into account, there is a growing concern over the slow pace of transformation in the racial distribution of students and staff across South African universities over the last two decades as a means to ensure equitable access to the higher education system (Breetzke & Hedding, 2016). There is often a recurrent argument among scholars that the current higher education expansion in the region could benefit the rich to a greater extent than the poor by tabling the issue of equality of access top on the agenda yet to be addressed in the coming years (Ilie & Rose, 2016).

6.2.3. A comparative analysis of state and challenges in Ethiopia and South Africa

The findings revealed that there are common trends across the three universities regarding HRM-related challenges (e.g. the existence of low salary scale, retention, etc.), resources and infrastructure, funding, research intensification, teaching style and curriculum, quality of education and governance and leadership. However, there are particular challenges facing Ethiopian universities and South African universities separately. For instance, the language policy and English as a language of education and the competence of the pupils is one of the key challenges facing the two Ethiopian universities and that deserves the attention of higher education policymakers. But, access to tertiary education is among the key challenges unique to the South African higher learning institutions. Similarly, the physical location of the university is particular to Haramaya University. In Ethiopia, access is not a problem. Every student who has scored the bare minimum requirement has the right to join any university regardless of their economic, ethnic or political background. However, that is or has been largely impossible in the setting of South Africa. In the recent past, advanced education was only for those who could afford to pay and someone who did not have the financial means to cover the tuition fees was not eligible to attend tertiary education. That is why access became one of the key bottlenecks encountering the South African university without considering the recent decision made to alleviate the problem through the movement of free education. In terms of funding, the South African universities raise funds from three sources such as student fees, the government and the private/non-profit organisations; as opposed to the Ethiopian universities which exclusively depend on government source (Teferra, 2013).

6.3. VULNERABILITY TO AND CAUSES OF ACADEMIC STAFF PROPENSITY TO DEPART, ACROSS THE THREE UNIVERSITIES

The findings of the study showed that academic staff's propensity to stay or leave differs significantly across the institutions, $F(2, 593) = 22.638$, $p<.0005$. Employees at UKZN and AAU were more in agreement than those at HU that they intend to remain in their jobs. The result implies that academic staff members at Haramaya University are more susceptible to departure from the institution than those at the other two universities (AAU and UKZN). However, contrary to this notion, the findings from the qualitative analysis revealed that all the three universities are prone or susceptible to academic staff's propensity to depart.

In terms of types or characteristics of brain drain phenomena, the departure of academic staff from higher learning institutions takes two forms: internal and external mobility (Semela, 2011). Internal brain drain occurs when employees decide to leave one sector and join other sectors; sister institutions within the same sectors; migrate from periphery to the centre, movement from clinical and research position to administrative position within the health sector and it may involve the mobility from universities to the private sector or non-governmental organisations. In the same manner, the external

brain drain happens in two ways: when academic staff decide to seek employment opportunities in economically more affluent countries and the other one is when the residents choose to remain in the destination countries after attending their studies (long-term and short-term studies). An analysis of qualitative data obtained from the three sub-Saharan African universities showed patterns similar with previous literature: internal movement and external mobility. The internal mobility takes the following routes: mobility within public universities, movement from public-private, the movement from university to the industry, and the mobility from universities to public offices in the form of both professional as well as a political appointment. This finding is consistent with others (Labonté et al., 2015; Wibulpolprasert & Pachanee, 2016) who support the rural-urban mobility; and those (Kober & Van Damme, 2006; Marchal & Kegels, 2003) who argue for the movement from clinical and research position to managerial position within the health sector; as well as those (Semela, 2011; Teferra, 2000) who argue for the movement of academic staff from universities to the private sector or NGOs. Consistent with empirical findings, academic staff members from the three universities, particularly the two Ethiopian universities, move to economically affluent countries through different mechanisms such as employment, family matters or scholarships (Baruch et al., 2007).

Despite the routs, common and some unique factors were identified as contributors to the likely departure of academic staff from the target universities. At HU, pay, working conditions, poor retention policies and strategies, political instability, technology and infrastructure (Özden, 2016), dissatisfaction and the rules and structures were among the main forces contributing to the susceptibility to depart. Furthermore, the location of the university contributed to the intention to leave, compared to the other two universities which are conveniently located in the metropolitan area where there is access to facilities, infrastructure and alternative job opportunities to generate an alternative income as a coping strategy for the soaring cost of living in the countries. At AAU, three major forces have influenced the departure of academic: payment or salary, the lack of enabling working conditions and the absence of poor retention policies and strategies. However, at UKZN, four factors were identified as the causes of the departure of academic staff: pay, working conditions, feeling of dissatisfaction, and retirement-related issues. The results were consistent with previous studies such as those by Baruch et al. (2007), Kana (2010), and Tettey (2006)) in that war or conflict, health risks, and political insatiability were the dominant push factors for the departure of highly skilled and competent professionals from Africa to the rest of the world. In a similar manner, other researchers have argued that the unprecedented globalisation phenomenon coupled with the lack of enabling working environments in the home countries poses substantial challenges to the majority of African higher learning institutions in terms of retaining their knowledgeable, well-educated, talented and skilled academics (Teferra & Altbach, 2004; Tettey, 2006). Empirical evidence based on 29 of a group of 43 potential respondents of South African medical doctors who relocated to overseas destinations revealed that economic reasons were the most significant drivers for departing, followed by the lack

of an enabling working environment or context and the magnitude of crime and violence in the country (Bezuidenhout et al., 2009). Moreover, the findings are also consistent with the study by Semela (2011) at selected Ethiopia public higher learning institutions which attributed the causes of the brain drain to both economic as well as political reasons.

6.4. DEMOGRAPHIC FACTORS AS ANTECEDENT OF ACADEMIC PROPENSITY TO DEPART AT THREE UNIVERSITIES

The study examined the effect of demographic variables such as gender, age, educational status, academic position, employment condition, family status, nationality, income and areas of specialisation on the academic employees' propensity to either depart from, or remain at, three public institutions (two in Ethiopia and one in South Africa). Close examination of the extent of the influence of demographic factors on the decision of academic employees to either remain or depart varied across the selected case study universities. For instance, none of the variables predicted academic staff members' turnover intentions at UKZN, whereas a limited number of variables (age, educational attainment, and employment status) significantly predicted turnover intentions of academic staff at AAU. A relatively large number of demographic variables including age, educational attainment, academic rank, marital status and field of specialisation significantly and statistically predicted the propensity of academic staff to either depart from or remain at HU (see Tables 5.3-5.10).

The following part excluded variables such as gender, nationality and income from the discussions and primarily focused on those demographic variables such as age, educational level, academic position, employment condition, family status and areas of specialisation that were found to statistically and significantly predict the propensity of academic staff to either depart from, or remain at, the three universities.

6.4.1 Age as antecedents of academic staff propensity to depart at the three universities

Age significantly predicted turnover intentions at two universities, AAU and HU. The results showed that the tendency to want to depart in the academic staff group older than 60 years of age differs significantly from academics younger than 50 years of age. This study is consistent with previous studies in that older people tend to remain in their workplace while younger people are more inclined to move (Emiroğlu et al., 2015; Karatepe et al., 2006; Lambert et al., 2001; Cotton & Tuttle, 1986). A few justifications for older people preferring to remain in their current workplace are: familiarity with the job and their work environment and senior people are relatively stable compared to younger people regarding their prospects (Wang, 2017, p.22). Other researchers have attributed this phenomenon to intergenerational differences between generation Y and generation X (Wang, 2017; Latkovikj et al., 2016). Generation Y employees generally have higher turnover rates than generation X employees in the workplace (Blomme, Van Rheede & Tromp, 2010). They have a lower level of organisational

loyalty and commitment, a weak psychological contract with the organisation and are apparently self-centered and demanding by nature (Blomme et al., 2010; Maxwell et al., 2010). Employees within the generation Y category have greater expectations of pay increases, career advancement and adaptability compared to most senior generations and they abruptly decide to leave their organisation whenever they think changing their current job is more beneficial to them (Wang, 2017; Blomme et al., 2010; Gursoy et al., 2008). Apart from intergenerational differences, the reason for the tendency of younger academic staff to depart from the two universities in Ethiopia is attributed to economic forces. In the past, academics in Ethiopian universities were highly privileged in that they had access to resources such as loans to buy property, cars, and houses, which is largely impossible for today's academics due to unprecedented expansion of the tertiary education sub-sector in the country. As a result, older people are relatively economically established in the sense that most of them have basic facilities such as housing, cars, and other basic necessities that young academics are mostly lacking in the current Ethiopian higher education sector.

6.4.2 Educational level as antecedents of academic staff propensity to depart at the three universities

Turnover intentions were found to differ based on the educational status at the two Ethiopian universities (AAU and HU). This finding revealed that academic staff with higher education levels prefer to remain in their positions at the two Ethiopian universities. This finding is inconsistent with past studies (Emiroğlu et al., 2015; Chen et al., 2010; Iqbal, 2010; Karatepe et al., 2006; Lambert, 2006; Carbery et al., 2003), which concluded that employees with a comparatively lower educational status have a lower level of turnover intention. They argued that people with higher levels of education have higher and more expectations, desire to obtain more job opportunities and have a broader view compared to uneducated people (Emiroğlu et al., 2015; Lambert, 2006). Empirical evidence has shown that academic staff with lower educational levels are more vulnerable to academic brain drain or turnover intentions at AAU. The evidence from Haramaya University revealed that academic staff members with master's degrees are more vulnerable to academic brain drain than those with a bachelor's or Doctorate degree, putting the long-term sustainability of the university in jeopardy. This phenomenon, if not curbed, will drain the cadre of academics who are expected to succeed in the academic structure in the future. Educational qualification did not significantly predict academic staff propensity to depart from or remain at UKZN.

6.4.3 Academic rank as antecedents of academic staff propensity to depart at the three universities

Academic staff's intention to depart was found to differ when looking at academic rank in HU compared to UKZN and AAU. This finding is consistent with the age and educational status variables that are largely related to academic rank. Despite the paucity of empirical evidence with regard to the

tertiary education sub-sector, one of the studies conducted in the context of Addis Ababa University revealed that lecturers make up the larger portion of departures (Mitiku, 2010). The current finding is consistent with this result in that associate professors significantly differ from assistant professors and lecturers at Haramaya University in their intention to either depart from or remain at their university. Associate professors are more likely to remain compared to assistant professors and lecturers. Familiarity with the job, strong social, research and career networks and relatively stable financial standing could be reasons that influence the senior academics' decisions to depart from their current institution.

6.4.4. Employment status as antecedents of academic staff propensity to depart at the three universities

Academic staff's turnover intentions differed based on employment status at AAU as opposed to the other two universities (UKZN and HU). The intention to either depart from or remain at the institution for those employees whose employment status is difficult to define, is significantly greater than those academic staff members whose employment status is temporary. Employment status did not significantly predict academic propensity to either depart from or remain at AAU. When examining the frequency, about 91.20% of the academics at AAU have the next highest mean value of intentions to depart (M = 3.3749, SD = 1.01103). This implies that permanent academic staff have a higher tendency to remain. This could be due to the fact that their employment situation offers them better job security.

6.4.5. Marital status as antecedents of academic staff propensity to depart at the three universities

Academic staff members' turnover intentions differed based on marital status at HU when compared to UKZN and AAU. Previous studies indicated that marital status significantly predicts employees' intentions to depart (Wang, 2017; Emiroğlu et al., 2015; Cho & Lewis, 2012; Carbery et al., 2003; Cotton & Tuttle, 1986). Most of the researchers have the notion that that employees who are unmarried are more vulnerable to staff turnover than married ones. A change of job is less disruptive for singles than married people who have more family responsibilities such as children, which influences them to remain in the organisation (Cho & Lewis, 2012). The current result is consistent with earlier studies in that family status significantly predicted academic staff's turnover intentions only at HU. Thus, married academic staff members have a lower tendency to depart from the institution.

6.4.6. Areas of specialisation as antecedents of academic staff propensity to depart at the three universities

The propensity of academic staff to either quit from or stay at their university significantly differs based on their areas of specialisation. Previous studies indicated that turnover intentions vary depending on the fields of expertise/disciplines/specialisations (Mitiku, 2010; Tettey, 2006).

According to Tettey (2006), "health sciences, engineering, business, economics and computer/information science" are areas that are vulnerable to brain drain or turnover. Another study conducted in the context of Addis Ababa University in Ethiopia revealed that out of 226 academics who left Addis Ababa University between 2005 and 2008, the majority (27%) were from the faculty of education and social sciences followed by the medical faculty (19%), technology (18.6%), science (16.4%), college of business and economics (14.16%), law 3.1%) and veterinary medicine and the music school, both accounting for 0.9% (Mitiku, 2010). Evidence showed that the area of specialisation is a significant predictor of scholarly staff propensity to either quit from or stay at HU only. Faculty members in the discipline of the sciences, technology, and engineering are more vulnerable to academic turnover than other disciplines. The current result is consistent with the previous studies in that employees with scarce skills are vulnerable to a brain drain as they have ample employment opportunities elsewhere. This implies that HU needs to devise special policies on how to attract and retain faculty members in the fields of science and technology vis-à-vis the existing higher education policy of 70:30, which forces the universities to enrol at least 70% of the pupils in the fields of science, engineering, and technology.

6.5. SELECTED ANTECEDENTS OF ACADEMIC PROPENSITY TO DEPART AT THREE UNIVERSITIES

The propensity to depart from organisations is not a one-time decision, rather it is an outcome of a cognitive process resulting from the interaction of a number of variables (personal, structural, psychological and macro factors). In order to understand employees' cognitive intention to depart from an organisation, it is vital for organisational leaders (including higher education leaders) to develop knowledge of the complex relationship that exists between precursors of staff propensity to depart and an academic employee's intention to depart from their organisations in order to take proactive measures to change the behaviour. Based on a review of extant studies, this study investigated the relationship between academic staff propensity to depart and a number of selected psychological constructs, i.e. QWL, OJ, JS, LMX, R&B and OCB at three Sub-Saharan African universities.

6.5.1. Antecedents of academic staff propensity to depart: UKZN

Analysis of the findings using structural equation modelling revealed that the rewards and benefits construct significantly influenced the academic staff propensity to depart at UKZN. Figure 5.18 in Chapter 5 indicated that out of the six paths, the R&B and IL is the significant path with($\beta = -.304, P = .020$).The negative value tells that a unit improvement in R&B leads to a reduction in IL (propensity to depart). Thus, R&B negatively and significantly influences academic staff intention to leave at UKZN and the result revealed that the remuneration package seems the most important factor for UKZN staff. Consistent with the findings, several studies in various contexts have supported that pay, fringe benefits and related factors have an impact on the decision of the staff members to either

stay or leave. Accordingly, past studies have supported the idea that lower salary and insufficient finance paid to the employees often leads to them leaving the organisation and the vice-versa (Mamun & Hasan, 2017). Moreover, similar analysis revealed that fringe benefits is another factor influencing an employee's decision to continue working and it especially has a critical role for employees at managerial level (Mamun & Hasan, 2017). Similarly, the relationship between compensation and employee intention to depart was established based on a sample of 60 employees from seven Safaricom dealers operating a business in Eldoret Municipality, Kenya (Chepchumba, 2017). As much as there are studies that support this notion, others also argue that the effect of rewards and pay on employee turnover intent varies depending on individual differences resulting from their personality types or levels of need attained in accordance with Abraham Maslow's Hierarchy of Needs Theory (De Gieter & Hofmans, 2015) which was not within the domain of this study. The primary goal of this study was to examine if rewards and benefits collectively influence academic staff working at UKZN as much as they do among academics working in Ethiopian universities (such as AAU and UKZN). Others have argued that pay and rewards are weak predictors of employee propensity to depart by identifying key predictors that can influence employee turnover decisions including the withdrawal process, key job attitudes, and the work environment (Bryant & Allen, 2013). However, findings from qualitative studies support the notion that both pay and work environment-related factors have predominately influenced academic employees' decision to leave the university, across the three universities. On the contrary, the other parts of the model such as the workplace harmony dimension of OCB have a slightly significant negative effect on academic staff intention to leave at UKZN though the p value is higher than .05. Yet, it is reasonable to argue that workplace harmony can also slightly negatively influence academic staff's intention to leave at UKZN.

6.5.2. Antecedents of academic staff propensity to depart: AAU

At AAU, as shown in Figure 5.19 in Chapter 5, the model for AAU includes a path from the job aspect or characteristics of QWL_JC, organisational justice dimensions (distributive and procedural), JS, LMX, R&B and the altruism dimension of OCB_A regarding the propensity of academic staff to quit from or stay at the university. Among the latent variables, only three were found to be significant. These were the job-related characteristics of the QWL_JC, OJ_PJ and R&B dimensions of the antecedents of academic staff's intention to leave. When compared across the three latent variables which were identified to influence the intentions of the academic staff to depart from their institutions, relatively speaking, procedural justice's influence was higher. For instance, the figure shows that an increase in the perception of academic staff on the procedural justice within the university decreases the academic staff intention to leave by 18.5%, whereas an increase in the perception of the quality of work life of the academic staff members in the university has the tendency to reduce their intention to depart from the university by 17.6%. However, with respect to the overall satisfaction of the scholarly

staff regarding the rewards and benefits, an increase in the positive perception of the scholarly staff regarding the rewards and benefits decreases the academic staff intention to leave by 15.4%. Two of the antecedents were found to be slightly significant. These were the altruism dimension of OCB_A (β=.113; P=.064) and JS ($\beta = .207; P = .051$). The rest of the latent variables did not predict academic staff propensity to depart at AAU.

6.5.3. Antecedents of academic staff propensity to depart: HU

Analysis of the study findings as depicted in Figure 5.20 in Chapter 5 revealed that among the latent variables, the job characteristics and work conditions dimension of QWL($\beta = -0.283; P = 0.015$), LMX ($\beta = -0.290; P = 0.009$) and R&B ($\beta = -0.280; P = 0.002$) were signficant paths that influence the acdemic staff propensity to depart at HU. However, the rest of the latent variables such as the altruism dimension of OCB (OCB_A) and procedural justice did not significantly predict academic staff's intention to depart from HU.

A closer look at the effect of the job characteristics and work conditions dimension of quality of work life on academic staff's propensity to leave can be further extrapolated that the decision of academic staff to either stay or leave is influenced by their perceptions of their job. If the academic staff feel that their job helps them to develop their creativity, foster creativity, sharpen their professional skills, help them realise their potential and always help them learn new things to do their job better, they may tend to remain with the institution. As is evident from the study findings, designing jobs that help develop the creativity of academic staff, jobs that foster creativity, jobs that sharpen the professional skills of the academic staff and jobs that are designed in a way that helps the job incumbent fully realise their potential and help them to learn new skills to do their job better have the capacity to hold the academic staff so that they remain with the university. Thus, it can be stated that increasing the job characteristics and work dimensions of QWL reduces the academic staff's propensity to depart by 28.3%. Further studies have shown that intellectual motivation, creativity, chances to employ skills and freedom and discretion are related to the attraction of early career academics to higher education institutions in South Africa (Lesenyeho, Barkhuizen, & Schutte, 2018).

Furthermore, the effect of the leadership-subordinate relationship on employee turnover decision or retention has been extensively examined with mixed findings in the past (Kim, Lee, & Carlson, 2010; Harris, Kacmar, & Witt, 2005). The study was mostly rooted in western culture and there has been an insufficient number of empirical evidence on the link between LMX and intentions to depart. The findings from academic staff working at the Haramaya University of Ethiopia revealed that there is a negative correlation between the level of quality of supervision (high or low) and academic staff's propensity to remain or depart. The finding can be further explained in that an improvement in the quality of a relationship by one unit has the effect of reducing academic staff's intention to leave by

about 30%. This finding justifies that embracive kind of leadership in the higher education has the power to curb the departure of academic staff, suggesting for the establishment harmony and trust within the institution.

In addition, further analysis of the effect of rewards and benefits on the academic staff's propensity to depart at HU implies that salary level and provision of compensation plays a critical role in influencing academic staff's decision to remain or depart from the institution. The study implies that an increase in the positive perception of the academic staff regarding the rewards and benefits at HU decreases the academic staff's intention to depart by 28%. The result of the current study is consistent with a previous study undertaken by the Department of Home Affairs in the Eastern Province in South Africa which revealed that salary is the chief driver of employee turnover (Mabindisa, 2013). Moreover, the result can be similarly justified as stated above in Section 6.5.1 in that some of the findings have supported the notion that pay-related factors influence employees' decision to depart (Chepchumba, 2017; Mamun & Hasan, 2017) as opposed to those who have slightly justified that pay-related factors have little power to explain the employees' decision to depart from an organisation (De Gieter & Hofmans, 2015; Bryant & Allen, 2013). Yet, regarding the situation of developing countries, the effect of pay cannot be undermined in explaining the decision to leave an organisation and seeking alternative opportunities elsewhere.

6.6. IMPACTS/CONSEQUENCES OF BRAIN DRAIN/ACADEMIC TURNOVER

There are widely accepted assertions that brain drain in general and academic brain drain, in particular, both have negative and positive consequences for the sending countries. The divergent paradigm and the convergence school of thought guide the discourse on the impact of brain drain (Osaretin & Eddy, 2012). The divergent paradigm elucidates that the loss of talent through brain drain severely impacts and causes substantial setbacks for the renaissance of Africa (Benedict & Ukpere, 2012; Gibson & McKenzie, 2011; Nabawanuka, 2011; Canibano & Woolley, 2010; Kana, 2010; Tessema, 2010; Baruch et al., 2007; Nunn, 2005; Shinn, 2002). They assert that the departure of human capital aggravates the already deteriorating number of skilled human resources needed for the development of source countries, it depletes the numbers of vibrant and creative people (including are entrepreneurs or academics), it encourages dependence on foreign technical assistance, it impedes the speed of technology transfer, it widens the disparity between the marginal and centre countries, and it adversely impacts the region's scientific results and income lost in tax revenues and in potential contributions to gross domestic product. But the convergence school of thought renders that the departure of human capital is beneficial to both the source and the receiving countries and they have the notion that the state and magnitude of brain drain in Africa are over-emphasised (Easterly and Nyarko, 2008). They argue that the source countries benefit from the departure of human capital in three ways: Remittances and human capital formation and opportunities for collaboration with home institutions in the form of

research engagement (Gibson & McKenzie, 2012; Gibson & Mckenzie, 2010; Grigolo, Lietaert, & Marimon, 2010; Kana, 2010; Franck & Owen, 2009; Rappoport, 2004). However, the negative consequences/impacts of brain drain appear to outweigh the positive ones (Benedict & Ukpere, 2012; Gibson & McKenzie, 2012; Gibson & Mckenzie, 2010), with these authors arguing that the phenomenon had widespread impact on the economic, political, social, demographic, technological and scientific progress of Africa leading to a widening gap in the contribution of Africa to the livelihood of the society that produced those professionals. This phenomenon has a damaging effect on the sustainability and global competitiveness of African universities (Mutula, 2009). In the same line of argument, the likely consequences of the departure of academic staff have been explored based on the data obtained from key informants across the three universities in the SSA and the findings revealed that the departure of academic staff impedes the overall performance of the university, hampering its capacity to execute its mission by limiting the university's capacity to attain its goals. The current finding is consistent with past studies that investigated the effect of employee turnover on institutional effectiveness and employee performance in the Department of Home Affairs in the Eastern Providence (Mabindisa, 2013)**.** The findings further indicated that a high staff turnover rate jeopardises the efforts of the organisation to attain its organisational objectives and has an adverse effect on innovation and on consistency in service delivery and may cause major delays (Mabindisa, 2013). Furthermore, it negatively impacts the overall performance of the universities vis-à-vis their three mandates, namely teaching-learning, research and community services.

The departure of academic staff also leads to loss of value accumulated over years. The loss of human capital is not similar to the loss of financial capital or other forms of capital. When an employee, especially highly trained and skilled one leaves an organisation, they go with the tacit knowledge, networks, aspirations, inspirations, skills and interpersonal relationships built while working within the organisation. Hence, it is costly for an organisation to lose an academic staff member who are presumed to be a valuable and irreplaceable asset as this may reduce the institution to an ordinary one, eroding its reputation and threatening its sustainability. Empirical findings suggest that human as well as social capital is a central determinant of resource productivity and sustainability (Šlaus & Jacobs, 2011). It was further argued that

"Most value in the modern company is intangible- that is, the assets lie in employees, intellectual property, expertise, relationships, and business processes, not in inventory, factories, or receivables. Organizations are increasingly investing in human performance improvement in recognition of the role of individuals in creating and maintaining value in the enterprise. A key aspect is keeping the right people in the organization" (Byerly, 2012, p.40)

The statement above clearly highlights the importance of human capital in the era of the 'knowledge economy' and hence the loss of human capital has an immeasurable effect on disrupting organisations'

ecosystems and networks. In the context of the business setting, the loss could be the loss of business relationships and networks and increased stress among remaining employees (Byerly, 2012). But in the context of higher learning institutions, it may affect the teaching-learning in the form of missing classes, the additional workload on the remaining employees, reduced research productivity at the institutional level, etc.

There are also some indirect costs that the universities incur due to the difficulty of replacement. Cascio (1976) as cited in Byerly (2012) identified the most frequently noted factors such as "Separation costs(e.g., Exit interviews, administrative functions, severance pay, and increased unemployment taxes), Vacancy costs (e.g. the net costs, minus salary savings, of increased overtime or temporary employees needed), Replacement costs (e.g., Costs of attracting, interviewing, and testing applicants; moving expenses; pre-employment administrative expenses), Training costs (e.g., bringing the new employee up to an acceptable knowledge level to perform the job) and Performance differential costs (e.g., diminished productivity during the warm-up period for new employees)" (Byerly, 2012, p.42).

Another key area impacted by the departure of academic staff was the research productivity of the universities (research and innovation). Declining research productivity often jeopardises the competitiveness of the universities amidst global and local competition over resources (human as well as financial resources) and students. Thus, the departure of academic staff negatively impacts the research productivity of the respective universities.

Another area of effect has to do with limiting the capacity of the universities to engage in advanced training such as postgraduate programmes. The depletion of academic staff especially professors and other senior academics with terminal degrees (PhD) has limited the capacity of the respective universities (especially in the two Ethiopian universities) to effectively run postgraduate programmes within the country. This has resulted in the departure of brilliant and dynamic young academics seeking opportunities elsewhere in developed countries, causing the universities in particular and the country in general to be susceptible to brain drain. Despite the challenge, there is an increasing number of graduates at the postgraduate training level in Ethiopian public universities. In 2010/11, there were only 21 PhD and 5876 master's graduates from Ethiopian public universities respectively and this number increased to 263 PhDs and 8588 master's graduates in the academic year 2015/16 respectively (MoE, 2017). This number is lower than the outputs (both masters and PhD) from the eight flagship universities in SSA between 2001 to 2011 (Cloete, Bunting, & Maassen, 2014). The postgraduate output in Ethiopian public universities is much lower than sister universities in most of the SSA countries. Such a low number of graduates with terminal degrees in local universities implies that there is limited local capacity to produce such workforces because of the lack of sufficient competent and skilled academic staff. This phenomenon forces many of the brilliant and vibrant young academics in the country with scarce skills to go abroad for postgraduate studies, making the country susceptible to

brain drain (Kim et al., 2011; Baruch et al., 2007). Despite the meagre number of PhD graduates in particular and the postgraduates in general which is currently an encouraging trend the performance of the graduates is obscured (Tamrat, 2018). However, in the case of the South African counterpart, the number of PhD graduates, in particular, is relatively higher than that of Ethiopian universities. A figure in 2015 shows that South African public universities were able to graduate close to 4619 masters and 2530 PhDs (HEMIS, 2015) compared to 8588 masters and 263 PhDs from the Ethiopian public universities. The figures indicates that Ethiopia is doing better in terms of output of master's graduates (which is twofold that of South African universities) but doing very much less with respect to the number of PhD graduates (of which South Africa produces about tenfold that of Ethiopia). The weak postgraduate programmes evident in the Ethiopian higher education landscape one way or another are related to the absence of qualified scholarly staff available for supervision and mentoring without mentioning the poor infrastructure and facilities for conducting higher level training. From this it can be implied that South African universities are doing better due to a number of factors including the long history of higher education, the relatively higher level of freedom and discretion in the university system, availability of better facilities and infrastructure coupled with better economic status. These factors help them attract highly qualified academics from across the world including from other sister African countries.

The departure of academic staff from higher education also has serious repercussions on the quality of education that is widely discussed among global leaders across the world with much emphasis in the SSA. As a key input for ensuring quality education, the phenomenon jeopardises the quality of education. The conceptions, characteristics, standards, causes and strategies on how to ensure quality in the higher education system have been widely discussed throughout the world (Yirdaw, 2016; Akalu, 2014; Geda, 2014; Campbell & Carayannis, 2013; Kahsay, 2012; Materu, 2007; Mapesela & Hay, 2006; Harvey & Green, 1993). The declining quality of education has multiple effects. It has the power to either push or pull top talent into the higher education system and it affects the quality and effective service delivery system in the respective countries. For instance, the availability of high-quality advanced educational opportunities for research in China (the second largest economy in the world) has helped the country to attract top scientists and researchers who have been working in other parts of the world (Dodani & LaPorte, 2005). Although ensuring quality education is the sum total of the interactive effects of a number of complex factors such as preparedness of the students at the lower level of the value chain (Spaull, 2013), the role of faculty members cannot be underestimated in contributing to or addressing quality problems.

Empirical evidence in African higher education has revealed that the departure of academic staff from a particular university impacts the quality of education of the former university while adding value to the gaining university (Nelson et al., 2016). Another study in the context of Nigerian universities

indicated that the departure of academic staff or highly skilled professionals has grave implications for the aggregate performance in the country (Joshua et al., 2014). According to ECA (2004) as cited in (Wosyanju et al., 2012), brain drain has the impact of reducing the already low-quality skilled manpower in African countries, slowing transfer of technology since qualified personnel move elsewhere, and it also widens the gap between developing and industrialised countries. Further evidence indicates that brain drain negatively affects the quality of graduates (Shumba & Mawere, 2012)

Among the key pillars of the advanced education mission is community engagement or services. The findings from the qualitative data analysis revealed that the departure of academic staff has a bearing effect on the community services supposed to be extended to change the livelihood of the society where they are operating. In particular, it deteriorates the service delivery system (e.g. educational services and health services). Past studies show that the departure of academic staff further impacts on the performance of the remaining staff, often leading to increased workload which further leads to committing errors that compromise the quality of service delivery (Wernick et al., 2016).

Furthermore, the departure of academic staff causes the national skill base in the country to deteriorate. The departure of educated and highly experienced academics and researchers negatively contributes to the overall science and technological development in the country. Empirical evidence shows that the contribution of science and technology to the globe is very low in Africa (Tebeje, 2005). The loss of human capital has both a long-term and short-term impact at the country level. Human capital is the basis for national economic, political, social and technological advancement. A professor from AAU views the situation as: "…definitely this country needs highly trained professionals in different professions. When you lose professors from the university you are losing other professionals from other sectors. The country is striving to become middle-income country and that is largely impossible without having competent professors in the university setting. High-level professionals are required and it is impossible to bring the country to the aspired level without these high intellectuals". This statement implies that the loss of professors is a loss of every other professional that can potentially enhance the development agenda of the respective countries.

6.7. MANAGEMENT AND MEASUREMENT OF BRAIN DRAIN

Analysis of the findings revealed that there is a lack of institutional structures that deal with the departure of academic staff in the university system, particularly in the two Ethiopian universities. Though it is not easy to determine the actual number of staff who have departed so far, staff members have been departing from the institution for various reasons. The finding is in line with previous studies that stated that brain drain data is often scarce and often inconsistent both across the globe and in particular in the SSA (Walton-Roberts et al., 2017). It is the lack of such data that makes the

management of brain drain challenging in Africa. This challenge in universities under study is largely related to the human resource management system in the university which is conventional and lacks professionalism. The other key issue of management of staff turnover or brain drain has to do with the culture of conducting exit interviews upon departure. In this respect, the two Ethiopian universities do not perform exit interviews and although the University of KwaZulu-Natal does, they are regarded as ineffective because often those who depart are not willing to complete the exit interview forms. An exit interview is one of the key mechanisms through which employers are able to understand the underlying reasons for the departure of academics from the universities, without which it is hardly possible to address the problem and devise strategies to overcome the incidents.

6.8. THE ROLE OF TALENT MANAGEMENT STRATEGIES FOR MINIMISING ACADEMIC STAFF PROPENSITY TO DEPART

Early researchers examined the impact of selected human resources practices on employee turnover (Huselid, 1995). The early notable findings on the strategies for reducing employee turnover by McEvoy and Cascio (1985) revealed that job enhancement interventions and realistic job previews provide the possibility to reduce employee turnover. Against this theoretical assertion, data collected via a semi-structured questionnaire was qualitatively analysed to assess the extent to which certain HRM practices are evident in the universities and their influence on staff retention. Some of the key practices identified during the interview were: induction and socialisation practices, coaching and mentoring practices, performance management practices, rewards and benefits practices, training and development practices, opportunities for career advancement, recruitment and selection, and communication system.

6.8.1. Induction and socialisation practices

Organisational socialisation, its content, and consequences have been extensively studied (Chao et al., 1994). According to Trowler and Knight (1999;p.178), the term induction refers to “Professional practices designed to facilitate the entry of new recruits to an organisation and to equip them to operate effectively within it” which traditionally involves formal induction programmes, mentoring arrangements and the provisions of orientation handbooks and organising social events. However, socialisation is a bit more of a complex phenomenon, referring to “the accommodative process which takes place when new entrants to an organisation engage with aspects of the cultural configurations they find” within the organisations. The socialisation process is often tacit, undetected by those involved, yet it has important consequences for both the new entrants and the organisations (Trowler & Knight, 1999). The job of induction and socialisation is vital because African higher learning institutions are within the “Era of mass early career academics and aging faculty” which Professor Damtew Teferra, a prominent academic in higher education called “Africa's paradox” (Teferra, 2016). The challenge of the lack of well-qualified and experienced academic staff is more pressing among

the newly established universities as part of the massification of higher education projects across many African countries and the recurrent departure of academic staff members for various reasons, as mentioned under Sections 6.3 and 6.5 of this chapter.

Analysis of qualitative data at the case study universities (especially at HU and UKZN) revealed that the induction practices are "limited in scope and less comprehensive" as well as "less intense and less frequent". Further analysis of the data showed that most of the induction at the two Ethiopian universities focused on one aspect of the university activities (i.e. teaching-learning skills or pedagogical skills). At HU, in particular, the induction takes place once a year and it is not for more than ten working days. However, at UKZN, the induction is relatively frequent and given every quarter as part of academic development. The induction period at HU is not as frequent as it should be. For instance, there is no orientation and socialisation programme for employees that are employed during the mid-year as there is only one orientation and induction session at the beginning of the year. This does not meet the very objective of induction programme which is aimed at socialising the newcomer to both the jobs and the organisation. In the context of Ethiopia, this practice is not only bound to higher learning institutions but also other private sectors (Yilma, 2015). Despite the importance of employee induction and socialisation for enhancing employee job satisfaction (Rowland, 2017) and it being considered vital in terms of engaging the new hires with organisational goals and increasing retention (Hellsten, 2018) to enhance the level of job embeddedness, the process is given less emphasis among the selected higher learning institutions in Ethiopia. One of the possible explanations for such behaviour is the lack of awareness of the HR managers and the higher education leaders at all levels of the importance of effective orientation for enhancing employee performance. The other reason could be embedded in the general socio-cultural context of the larger society where detailed communication on something is not welcomed. The presumption is that people understand the situation by looking at the context and they largely learn institutional tacit norms and cultures informally than through the formal procedures.

6.8.2. Coaching and mentoring practices

In a world where there is stiff competition to attract top talent from all parts of the globe, retaining academics in African higher learning intuitions where salary is usually not competitive enough to retain them requires a different approach. Effective coaching and mentoring are imperative to ensure the academics enjoy their work and to gain their loyalty particularly that of the young employees.

A qualitative assessment aimed at exploring the existence of coaching and mentoring practices in the case study universities, revealed that they are rarely practised. Two major issues were raised at this level: the lack of integrated policy framework and the absence of institutional capacity and experience (even sometimes the lack of willingness) on the side of the senior academics for coaching and

mentoring early career academics. However, there were some self-initiated mentoring efforts by those academics who felt responsible for the sustainability of their disciplines as well as the university at large. Previous studies documented the effectiveness of mentoring practices in the retention of faculty (Geber, 2013). The studies indicated that coaching and mentoring may not minimise the number of academic staff from leaving the universities as it facilitates their career development and career progression, but the very goal of mentoring is to help young academics to think of establishing a meaningful career within their respective countries (Geber, 2013). The goal is to inspire the young to consider remaining within the country and to establish their own career at home. Furthermore, studies which were conducted in various settings to examine the extent to which mentoring reduces employee turnover intentions produced mixed results with some that argued that it negatively influences turnover intention (Ambrosius, 2018) and other studies that argued that its effect on turnover intentions is contingent on the different functions of mentoring (Hall & Smith, 2009). It was not the primary objective of this research to evaluate the degree to which coaching and mentoring can influence the academic staff's intention to depart; instead, the aim was to assess the presence or absence of the practices which lay down the basis for further empirical studies in the future. Therefore, it is imperative for the universities to a devise policy framework that defines the relationship between the mentor and the mentee as well as enhances the capacity of the senior academics so that they will be able to enrich the young academics to become a better scholar.

6.8.3. Performance management practices

The term performance management is a broad concept that encompasses designing performance standards, assessing performance and providing systematic feedback to the employees. Traditionally, it is synonymously used with performance appraisals which refer to "the process of determining and communicating to an employee how well he or she is performing on the job and ideally establishing a plan of improvement"(Amin, Ismail, Rasid, & Selemani, 2014, p.129). From this definition it is clear that the objective of performance management is twofold: administrative and developmental.

Thematic analysis of qualitative data from the three case study universities has shown that integrated performance management practices are rarely evident in the case of the two Ethiopian universities whereas the compliance level with the performance management practices at UKZN has been an increasing trend from time to time since its introduction as an integral part of the talent management system particularly after 2015. More specifically, at HU, the lack of a comprehensive and fully-fledged policy framework to manage the process; dependence on limited source of information and the lack of comprehensiveness (i.e., student lecture evaluation only), lack of linkage with incentive system, delayed feedback, the lack of seriousness in the management of the appraisal process, the lack of capacity to differentiate between good and poor performers were some of the key issues identified by the study. Similarly, at AAU, the practice rarely provides sufficient information for the scholarly staff

to either enhance their productivity or further develop themselves both personally and academically. On the contrary, the findings from UKZN revealed the existence of the system but the key informants have the notion that the standards are too strict and rigid should be revisited. The issue of performance management among academics remains one of the big issues at UKZN.

Past studies have shown that performance assessment has to be guided by the performance management policy, the performance should be evaluated based on objective and measurable criteria and feedback to employees on their performance should be provided on a frequent and regular basis (Amin et al., 2014). The lack of effective management of the process often leads to many adverse effects on the organisation, including "low morale, decreased employee productivity and low enthusiasm to support organisations, hence decrease organisational performance" (Amin et al., 2014; Osman, Ho, & Galang, 2011). The lack of an integrated and well-designed policy framework on the side of the Ethiopian universities for managing the performance of academics and the lack of its linkage to rewards and benefits has serious repercussions on the motivation and morale of the academics staff who are doing their job well but not recognised compared to those academics staff members who seldom contribute to the achievement of organisational goals. This phenomenon is related to the bigger picture in terms of the strategic plan of the university. The institutional strategic plan of the university is highly dynamic and influenced by the political developments at the national level.

6.8.4. Compensation management practices

Compensation comprises the benefits (both financial and non-financial) offered by institutions to their employee in order to attract or retain the employees (Devar, 2017). As much as there are findings on the role of performance-based compensation in "attracting and retaining employees in an organisation" (Kumar & Mathimaran, 2017; Robyn & Du Preez, 2013), there is also evidence that does not support the idea that performance-driven compensation is negatively related to employees' propensity to depart (Ambrosius, 2018).

An aim of this study which was to assess the extent of the existence of compensation management practices at the three universities revealed that there is a varying level of practices. The compensation practices at the two Ethiopian universities are characterised by a stagnant or static salary system, the lack of a performance-driven recognition and reward system, and a low level of salary compared to other industries and sister universities in the region. The argument related to the low salary level was also shared by key informants from UKZN too. When compared across the two universities in Ethiopia, there was no substantial difference between them despite their local and geographic contexts where HU is located in the rural part of the country about 526km away from the capital Addis Ababa where AAU is located. This implies that the compensation structure does not take into account local

variations and applies a 'flat' salary structure across all public universities in the country. Such practices, however, do not go hand in hand with the highly differentiated performance across the institutions and employees' tendency towards individualism and individual performance across the universities as opposed to the widely accepted norm of collectivism in the past. In the case of UKZN, the compensation system was guided by the university's Conditions of Service category of the employees.

6.8.5. Training and development practices

Analysis of the findings witnessed that there is a varying level of training and development practices across the three case study universities despite the lack of an integrated training and development policy framework (especially at the two Ethiopian universities). At HU, the training and development which is one of the HRM practices rarely takes place and is not well-structured in the university system. The job is not done based on a proper needs assessment. But, none of the key informants from AAU and UKZN directly commented on the nature and extent of the existence of the training and development practices of their respective universities. Past studies have diverse results on the effect of training and development on the employee turnover intentions. On the one hand, some researchers have argued that effective training and development facilitates the departure of employees as it widens their skills and knowledge of employability (Ambrosius, 2018). On the other hand, others have argued that training positively contributes to employee retention as it enhances the knowledge and skills of the employees to meet the attainment of organisational goals through enhancement of efficiencies and creation of values in a way that contributes to employee retention (Johennesse & Chou, 2017). Furthermore, the authors argued that training ensures role clarity which further alleviates employee job-related anxiety and that improves employee retention in the same way (Johennesse & Chou, 2017). And hence, the authors suggested that training and development should be adequately developed and efficiently designed (Johennesse & Chou, 2017; Lee & Bruvold, 2003). This notion is contrary to the findings from HU where it was argued that the training and development are provided in a very dispersed and incoherent manner.

6.8.6. Opportunities for career advancement /promotion practices

Availability of opportunities for career advancement/promotion practices is one of the key activities within an organisation for boosting employee morale, motivation, performance and finally may influence them to remain at or depart from the institution. The findings from HU, in particular, revealed the existence of such opportunities in the form of promotion from one rank to the next academic level. In the context of HU and the Ethiopian public universities, there are six levels of academic rank with the almost level position of graduate assistant (I and II), assistant lecturer, lecturer, assistant professor, associate professor and full professor. Although advancement from the rank of graduate assistant to

assistant lecturer is automatic and made for procedural consumption, the promotion from lecturer to assistant professor is made in two ways: one is through attainment of PhD education level or through university promotion procedures that consider four major criteria: effective teaching, publication, participation in university affairs (administrative and leadership) and community services. Furthermore, promotions from assistant professor and onwards depend exclusively on university promotion procedures using the same criteria such as effective teaching, publication, participation in university affairs (administrative and leadership) and community services. Among the major challenges raised by the key informants with respect to promotion was that related to the duration and standards. They claimed that the time is getting longer and the criteria are becoming more stringent than in the past. The findings have shown that there is no significant difference between the ranks in the form of compensation and benefits which is one of the likely reasons why academic staff members may stay within the same academic rank for a longer period of time. If an employee does not want to be promoted to the next academic rank or is not passionate enough to move up the academic ladder for personal satisfaction, they can stay in the current rank forever as there is no mechanism that forces them to advance academically. Publication is not part and parcel of the performance of academic staff at the two universities in Ethiopia. This is completely different from the practice at most of the universities in the South African higher education system where conducting research is an essential part of the annual performance management system of universities, including at UKZN. In addition, there are a number of career development opportunities for South African academics compared to academics working in the Ethiopian Universities, including AAU and HU. Although there are some initiatives at AAU, it can be said there are none at HU. In addition, there are support systems for most of the South African academics to participate in local and international conferences as well as attend training that enhances the professional development of the academic staff.

6.8.7. Recruitment and selection practices

Recruitment and selection is another area that deserves attention to attract and retain academics. The finding from HU revealed that for quite some time the entry-level posts in the university system were filled through appointment by the Ministry of Education which was largely criticised by many who said that the Ministry has a greater political objective than an academic one. Though the effect of such a decision on the higher education human capital development is yet to be seen, there are clear signs of a lack of integration between those recruited by the Ministry of Education of Ethiopia versus those that were recruited by the university through the proper academic staff recruitment system. However, since the recent past, the situation has changed and now it is up to the university to hire academic staff members. The university has a formal recruitment and selection policy that specifies the procedures that need to be followed while recruiting academic staff. But, the extent to which the policy is taken seriously while conducting the job is something that deserves further analysis as it was not in the scope

of this study. Overall, there is a perception among the university leaders (deans and heads of departments as well as HR managers) that the job is not that taken seriously enough, at least at HU. Another area of contention among the colleges was the recruitment of expatriate staff at HU. Recruitment of expatriate staff is usually done in the form of a committee that is selected or sometimes hand-picked without many criteria from different departments. On the contrary, compared to AAU and HU, the appointment of academic staff at UKZN is far more stringent and internationally acceptable for all academic ranks. The process of recruiting and appointing of developmental lecturers who have a grace period of up to five years to earn a PhD degree before they become lecturers was evident in at the designated South African universities, including UKZN.

6.8.8. Communication practices

The findings revealed that the communication practices at the two Ethiopian universities are largely conventional and less eco-friendly. It was argued that the communication between sister departments and colleges is very weak to the extent that one of the deans in the university may not know when another dean or head of department is absent from work for various reasons. The respondents argued that the communication system is not lean and lacks contemporariness. The universities rarely employs ICT technologies or platforms. The lack of transparent and lean communication has a bearing effect on the behaviour of employees as they feel alienated from what is going on within the system and they may tend to depart as a result thereof. In this line of argument, previous studies have documented the role of communication gratification and its relationship with job satisfaction (Proctor, 2014; Ramirez, 2012) as well as turnover intention (Tanius, Pheng, Kasim, & Yulia, 2017; Ölçer & Özenir, 2014; Siti Fatimah, 2008). A study based on 195 academic staff members from a higher education institution in Selangor in Malaysia revealed that there is indeed a positive correlation between communication and intentions to depart (Tanius et al., 2017). As communication is an integral part of managing relationships between the managers and subordinates at work, it has the power to create an atmosphere of communication satisfaction that fosters lower employee turnover intention. This is because the system involves communicating tasks, providing timely work-related feedback, encourages employee involvement in decision-making affairs of the institutions and encourages collegiality (Nwagbara, Oruh, Ugorji, & Ennsra, 2013). Therefore, improving organisational communication positively contributes to scholarly staff's intention to stay at the institution. In addition, the absence of lean communication within the system has serious repercussions in various ways. Firstly, it obscures information and exposes employees to either distortion of information or leads to unnecessary gossiping and organisational politics. Secondly, the lack of integration of ICT into the communication system within the university (especially the adoption of institutional emails) results in unnecessary costs of printing and duplicating as well as human time distributing the letters. Thirdly, it hampers the speed at which decisions should be made within an organisation (i.e. it contributes to delayed

decisions) (Amin et al., 2014). Fourthly, it negatively affects the knowledge management system within the university. Finally, the extent to which effective networking and communication within an organisation have a positive or negative contribution for universities in economically struggling countries like Ethiopia is yet to be empirically verified beyond the assertions made herewith.

6.9. MODELLING STRATEGIES FOR CURBING ACADEMIC STAFF PROPENSITY TO DEPART FROM ETHIOPIAN PUBLIC UNIVERSITIES AND UNIVERSITY OF KWAZULU-NATAL IN SOUTH AFRICA

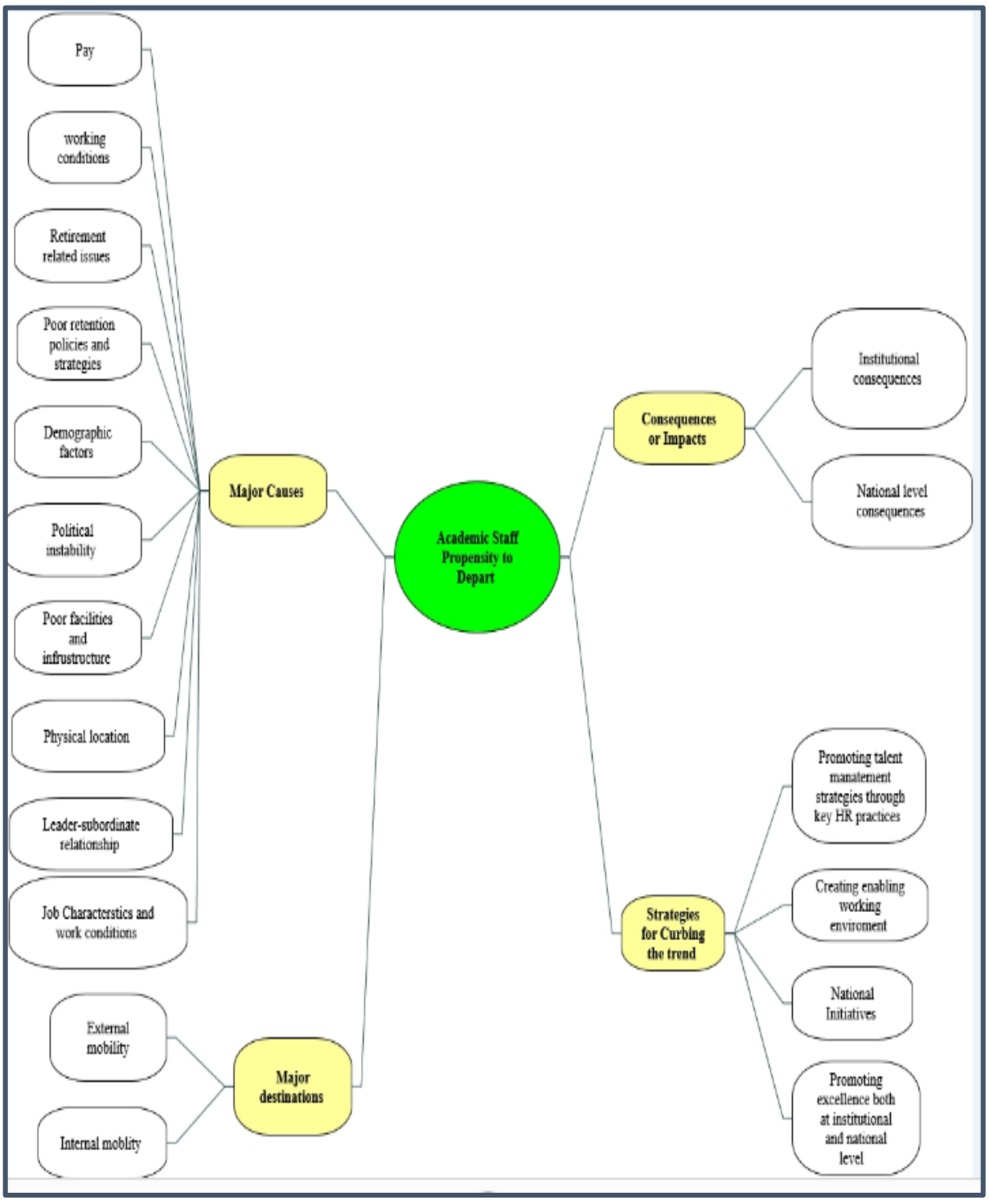


Figure 6.1: A conceptual model of the causes, characteristics, and consequences of academic staff propensity to depart from three Sub-Saharan African universities and proposed possible retention strategies

Source: Researcher's own construction based on the qualitative and quantitative data analysis results (2018)

6.10. CHAPTER SUMMARY

In this chapter, the findings reported in the previous chapter were interpreted with appropriate implications and the findings were also referenced against existing literature on previous research works. The effect of demographic factors on the academic staff's propensity to leave the respective universities varied across the three universities. Furthermore, variation was also identified across different organisational and psychological factors at the three universities regarding the decisions of staff to depart. Significant factors influencing the propensity of academic staff to depart at the three universities (AAU, HU, and UKZN) were briefly discussed. The findings obtained through the qualitative analysis were also extensively reported pinpointing some of the factors that impacted the academics' decision to depart from the three universities. The next chapter presents a summary of the key findings, limitations of the study and recommendations for future research.

CHAPTER SEVEN

SUMMARY, RECOMMENDATIONS, AND CONCLUDING REMARKS

7.1 INTRODUCTION

This chapter provides a summary of the key findings, recommendations, limitations and suggested directions, and concluding remarks.

7.2 SUMMARY OF KEY FINDINGS

The research was designed to attain the following key objectives:

Objective 1: To investigate the state and challenges of higher education in the two countries.

Key findings: The analysis of qualitative information revealed that the higher education sub-sector in the two countries has faced multifaceted challenges ranging from broader human resource-related issues (such as salary, loss of qualified academic staff, poorly qualified academics), lack of sufficient resources and infrastructure, funding-related challenges, quality of education and finally governance-related issues.

Objective 2: To examine the extent of vulnerability to and causes of academic staff turnover or brain drain across the three universities.

Key findings: Analysis of the findings showed that (both qualitatively and quantitatively) Haramaya University is more susceptible to academic brain drain than the other two universities. The qualitative assessment, in particular, revealed that the anticipated academic mobility in both countries takes the following major routes in one way or another: mobility within public universities (common in both countries), movement from public-private (quite a common trend in South Africa but rarely happens in Ethiopia since the private higher learning institution is not as matured as that of the public universities which are largely sustainable), the movement from university to industry (common to both countries), the movement from universities to public offices in the form of both professional as well as political appointments (common in both the South African and Ethiopian context) and the departure to go aboard (common in Ethiopian context but rarely happens in the case of South Africa). The following reasons were identified as the major causes of the departure of academic staff from HU: pay, working conditions, poor retention policies and strategies, political instability, technology and infrastructure, dissatisfaction and the rules and structures. Above all, the location of the university has contributed to the intention to leave compared to the other two universities which are more conveniently located in the metropolitan area where there is access to facilities, infrastructure and alternative job opportunities to generate an alternative income as a coping strategy for the soaring cost

of living in the countries. In the same manner, three major drivers have influenced the departure of academic staff at AAU: payment or salary, the lack of enabling working conditions and the lack of poor retention policies and strategies. In the same fashion, four factors were identified as the causes of the departure of academic staff at UKZN: pay, working conditions, feeling of dissatisfaction, and retirement-related issues.

Objective 3: To determine the antecedents to academic staff's propensity to leave, across the three universities.

Key findings: An appropriate statistical analysis of the data obtained from academic staff members working at the three universities was conducted to assess the effects of both demographic as well as other organisational factors (QWL, OJ, JS, LMX, R&B and OCB) on the academic staff's propensity to depart. The effect of demographic factors was assessed using ANOVA and the findings revealed that demographic variables, namely age, educational attainment and employment status significantly predicted the turnover intentions of academic staff at AAU. At HU there was a relatively larger number of demographic variables including age, educational attainment, academic rank, marital status and field of specialisation that significantly and statistically predicted the academic staff's propensity to either depart from, or remain at, HU. However, contrary to the first two universities under consideration, the findings from UKZN showed that none of the demographic variables statistically and significantly predicted intentions to remain.

As opposed to the effect of demographic variables, the influence of organisational forces on academic staff's propensity to depart was assessed using descriptive as well as inferential statistics. The original constructs and items were checked and examined to ensure validity and reliability using factor analysis (EFA and CFA). After proper confirmatory factor analysis had been done, new constructs or latent variables emerged and were subjected to further analysis to determine if a significant path(s) exists between the predictor and the outcome variable under measurement. Further analysis of the relationship revealed a significant path between the variables and academic staff's propensity to depart constructs. Accordingly, the findings revealed that out of the six paths, only rewards and benefits significantly predicted the UKZN academic staff's propensity to leave($\beta = -.304, P = .020$). In addition, it can also be safely stated that the workplace harmony construct of organisational citizenship behaviour slightly negatively influenced the UKZN academic staff's intention to depart.

The findings also revealed that three variables including the job characteristics and work conditions dimension of quality of work life, procedural justice dimensions of organisational justice, and rewards and benefits significantly negatively predicted academic staff's propensity to leave at AAU. The altruism dimension of OCB and JS were found to slightly significantly predict academic staff's propensity to depart at the university. Lastly, the structural equation modelling at HU revealed that job

characteristics and work conditions dimension of quality of work life (QWL)($\beta = -0.283; P = 0.015$), leader-subordinate relationship (LMX) ($\beta = -0.290; P = 0.009$) and rewards and benefits (R&B) ($\beta = -0.280; P = 0.002$) were found to be slightly negatively prediciting the academic staff intention to depart.. Furthermore, the results of standard mulitple regression analysis revelaed that the six, eight and six independent variables in combination had a significant effect on academic propensity to leave (F=8.334, P<0.005; F=14.073, P<0.005; and F=10.744, P<0.005) at UKZN, AAU and HU, respectively.

Objective 4: To explore how the departure of academic staff impacts the performance of the three universities.

Key findings: The qualitative analysis of the findings revealed that the departure of academic staff has a multifaceted effect (negative and positive) both at individual institutional and national level. It was stipulated that the loss of human capital impacts the overall performance, competitiveness (nationally and internationally) and finally the sustainability of the three institutions under study. In this respect, the following key consequences of the departure of academic staff from the respective institutions were identified: declining overall performance and institutional capacities, loss of value, difficulty of replacement, declining research productivity, quality of education, community engagement and services and depletion of the national skill base which has a wider socio-economic, political and technological impact at national and regional level, contributing to the ever-widening gap between the poor and the rich countries of the globe.

Objective 5: To assess the extent to which an institutional mechanism exists at the three universities for measuring, evaluating and managing brain drain for increased growth and development.

Key findings: An assessment of the existence of institutional mechanisms for measuring, evaluating and managing brain drain at the three cases study universities revealed a relatively well-structured system exists in UKZN to monitor the existence of the problem. An exit interview at UKZN is adopted as a mechanism to unravel the reasons for the departure of academic staff despite the lack of willingness of those who are departing to fill the exit interview form. In contrast, at the two Ethiopian universities (HU and AAU), the data is scarce, intermittent and irregular and an exit interview is rarely adopted as an institutional mechanism for understanding the underlying reasons for the departure of academic staff at the two universities. A certain degree of informality and a poor HRMIS was observed at these universities, as opposed to UKZN where there is a relatively better infrastructure and system for tracking the departure of academic staff.

Objective 6: To explore how the various HR practices, policies, and strategies minimise the vulnerability of academic staff intention to depart or improve the retention of talents in the university system.

Key findings: HRM policies, strategies, and practices play a significant role in retaining talent. Analysis of the findings revealed that induction and socialisation programmes are practised to a varying extent across the three universities with a relatively more intense focus at UKZN than at the two Ethiopian universities. At Ethiopian universities, the induction programmes have limited scope, and are less comprehensive, less intense and less frequent. The other key HR issue that has the power to enhance academic staff intention is coaching and mentoring. Across the three universities, coaching and mentoring lack formalisation and institutionalisation in the organisational system due to a lack of coaching and mentoring capacity and experience. Performance management is another area that deserves attention across the three universities from different perspectives. The performance management practices at the two Ethiopian universities lack a comprehensive policy framework and strategy for guiding the assessment and management of academic staff's performance; largely characterised by dependence on a single source of information and a lack of comprehensiveness, questioning its validity and reliability. Further, there is lack of linkage between performance management and an incentive system, delayed feedback, lack of seriousness in the management of the appraisal process and lack of capacity to differentiate between good and poor performance. However at UKZN, there is a relatively well-established and stronger performance management system but the participants had mixed feelings as the standards are too strict and too high to attain. Further, compliance and its link with the conditions of service for its implementation is largely one of the areas of controversy. The rewards and benefits structure at the Ethiopian higher learning institutions differed significantly from that of the South African counterpart in that there is a stagnant or static salary payment system, performance-based recognition and rewards and a low salary. The other HR practice explored was training and career development and the findings revealed that the practice is rarely done and not well-structured (hence the absence of integrated human capital development policy at the institutional level) in the university system. There is a lack of seriousness in terms of identifying the training needs or skills gaps which may be related to the lack of a sound and integrated performance management system. In addition, none of the key informants from two of the universities (AAU and UKZN) commented directly on the training and development practices in their respective institutions. The findings from all three universities also revealed that the promotion process is long and time-consuming which discourages academic staff from applying and this in turn affects their career progress. Particularly at UKZN, there is a strong belief that the criteria for promotion are too high to attain and proper coaching and mentoring do not take place. This discourages the young faculty members from applying for promotion and influences them to join universities where such criteria are not mandatory. With respect to recruitment and selection of scholarly staff, the process is verifiable in

many instances. However, there was a situation where the government organ in charge of overseeing the higher education sub-sector pursued a different route to bring in academics, particularly at the developmental stage, as part of developing the future cadre of academics both in Ethiopia and South Africa. This move has led to poor integration among those being hired by the university and the higher government body of the institutions. Finally, the extent of the leanness of the communication system in the organistions was assessed and the findings revealed that higher learning institutions in Ethiopia, with particular reference to AAU and HU, follow a very conventional approach to communication compared to the South African counterpart (i.e. UKZN) where the communication system is largely smooth and ICT integrated. In the case of Ethiopia, the communication system is largely conventional and paper-based, hampering the free-flow of information across all employees at the university. The finding revealed that virtual communication is lacking in the system. The broader environment, including the overall socio-economic, political and technological forces, plays a greater role at this juncture. More specifically, the literacy rate of the working population, the availability of internet facilities, and continuous supply of electricity, unemployment rate, technological advancement and culture of transparency within the institutions largely determine the extent of adoption of an ICT-based communication system at the institutions.

In essence, the absence of amalgamation between the HR wing and the operational (academic) wing was identified as the key challenge facing all universities in the two countries. The UKZN structure is relatively better in terms of this phenomenon but at the Ethiopian counterparts the HR wing is largely less-capacitated and lacks professional and qualified human resources for designing policies and strategies and for effectively implementing them.

Objective 7: Modelling or proposing coping strategies to curb the trend of brain drain across the three universities

Key findings: An integrated retention strategy was developed to minimise the departure of academic staff both from the two Ethiopian universities and the South African university. Academic brain drain is caused by a multitude of factors ranging from demographic factors, personal and structural factors, to the larger macro environment factors including socio-economic, political, and technological advancement of the country in which the university is operating.

7.3. RECOMMENDATIONS

The following recommendations at various levels (institutional and national) are proposed on the basis of the key results of the study. In the context of Ethiopia, most of the public universities are government-subsidised through the central government and hence any recommendation made at an institutional level can have an implication at the national level. It is against this presumption that the

scope of implementing the recommendations is specified to include both the national stakeholders as well as the respective institutions. However, in the case of UKZN, most of the recommendations with the exceptions of the few are limited to the institution only. The recommendations, the scope of implementation and suggested implementing institutions are highlighted in the next paragraphs.

Research objective 1: To investigate the state and challenges of higher education in the two countries

Recommendation 1

Improve the overall human resource management system with the goal of enhancing the attraction, maintenance and retention of highly qualified and experienced academic staff.

Recommendation 2

Improve resources and infrastructure through the establishment of research facilities at various levels (departmental, college, institutional and national level facilities) to expose both students and academics to the state of the art technologies. This will empower them to innovate and produce relevant research findings that can improve the visibility and competitiveness of the institutions both locally and internationally.

Recommendation 3

Devise institutional and national level policy frameworks with the aim of improving research involvement through the provision of funding, especially for young academics to ensure the sustainability of the institutions in the future.

Recommendation 4

The issue of quality of education has been at the centre of debate among higher education leaders as well as relevant heads of states both nationally, regionally and internationally. Improving the already deteriorating condition of the quality of education is a necessary evil for African higher learning institutions to remain competitive and sustainable both regionally as well as globally. As a prime input to the education ecosystem, improving the quality of life of the faculty members through proper staff-student ratio can have a paramount impact in the improvement of the quality of education, among others. This requires fulfilling the basic necessities for them such as housing, transportation and other facilities for themselves and their families.

Recommendation 5

Improve overall governance and leadership in the university. This involves implementing collegial leadership style and minimising bureaucratic structure to enhance adaptability to the changing context of the workplace and the economy within which the universities are operating

Research objective 2: To examine the extent of vulnerability to and causes of academic staff turnover or brain drain across the three universities

Recommendation 6

The pay scale needs to be improved for academics. Introduce a differential pay-system taking into account the context of the universities, particularly in Ethiopia. As it stands now, there is a sense of uniformity across the country in terms of the salary scale. Also, provide horizontal a salary scale for the academics as part of the appreciation of their performance both in terms of output and experience. Above all, conduct a national-wide compensation and benefits study to make sure that there is both internal and external equity to retain highly experienced and qualified academics especially those with terminal degrees.

Recommendation 7

The working conditions need to be improved both at departmental, institutional and national levels. This involves providing academic freedom and institutional autonomy on how universities should be governed, how the curriculum should be designed and implemented and generally freedom of expression within the university system. In addition, provide appropriate facilities and infrastructure that facilitate the effective performance of the academics within the university. This is particularly true for the two Ethiopian universities.

Recommendation 8

Universities should design integrated staff retention (or talent retention) policies and strategies to retain their academics.

Recommendation 9

Ensure political stability or minimise political instability and ensure a safe working environment

Recommendation 10

Improve technology and infrastructure

Recommendation 11

Minimise factors contributing to academic staff's job dissatisfaction

Recommendation 12

Ensure that rules and structures best serve the interest of the organisation as well as the employees. Promote productivity and innovativeness within the institution and enhance adaptability to the changing environment due to both global, national and institutional factors.

Recommendation 13

Devise context-specific policies and strategies that help retain highly experienced and well-qualified academic staff.

Recommendation 14

Revise retirement policies so that well-versed academics can continue to work in the institution and contribute to the mentoring and coaching, academic development and so forth.

Recommendation 15

Minimise overall susceptibility to brain drain.

Research objective 3: To determine the antecedents to academic staff propensity to leave across the three universities

Recommendation 16 (AAU and HU)

Promote diversity management by overcoming the temptation of a one-size-fits-all style of management as there is a diversified workforce in the institutions that tend to identify themselves at different levels, having varying interests and aspirations.

Recommendation 17 (The three universities)

Improving rewards and benefits.

Recommendation 18 (UKZN)

Improve workplace harmony.

Recommendation 19 (AAU and HU)

Design academic jobs in such a way that it helps develop the creativity of academic staff, foster creativity, sharpen their professional skills and helps the job incumbent fully realise their potential which allows them to learn new skills to do their job better.

Recommendation 20

Improve the leader-subordinate relationship through promoting quality communication.

Recommendation 21

Improve organisational justice through promoting consistent, fair and equitable institutional policies and practices and promoting a transparent system.

Recommendation 22 (Ethiopia)

Improve selfless behaviour and a sense of patriotism within the institution with the objective of promoting sense of organisational citizenship behaviour.

Research objective 4: To explore how the departure of academic staff impacts the performance of the three universities.

Recommendation 23

Engage in aggressive short-term skill-based as well as long-term professional degree-based integrated human capital development programmes.

Recommendation 24

Promote joint appointments for faculty members so that they will be able to work both in the university and industry in the absence of the university's ability to meet their basic financial needs.

Recommendation 25

Enhance virtual engagement of the intellectual in the diaspora for skill transfers and national human resource development through the establishment of research projects that have a wider scope.

Recommendation 26

Promote research universities in the country with the goal of nurturing people of high calibre in research and development at the national level and to support the rest of the emerging universities in the country.

Recommendation 27

Institutionalise extensive succession planning approaches, policies, and strategies for developing leaders and academics to fill vacant posts due to the departure of scholarly staff.

Research objective 5: To assess the extent to which institutional mechanism exists at the three universities for measuring, evaluating and managing brain drain for increased growth and development

Recommendation 28

Promote a data revolution through the implementation of a human resource management information system that aims at identifying and documenting the number, field of specialisation, level of education, academic rank, age, family status, reasons for the departure, likely destinations (local or abroad) etc.

Recommendation 29

Establish an integrated institutional mechanism for measuring and managing brain drain at various levels so that it is possible to sense the magnitude and extent of the problem to devise policies and strategies to retain talents.

Research Objective 6: To explore HR practices, policies, and strategies in minimising academic staff intention to leave at the three universities

Recommendation 30

Develop an orientation kit with detailed information and institutionalise continuous socialisation programmes both at job, department and institutional level with the goal of helping the newly hired academics to adapt to the environment and subsequently improve their performance.

Recommendation 31

Establish a coaching and mentoring programme within an institution to develop a cadre of young academics for sustaining the future of tertiary education in the country through the development of high impact and wider scope projects that involve many academics, including senior and junior staff members to develop their academic potential in the future.

Recommendation 32

Establish a performance management system that is free of any political interests and that is exclusively aimed at measuring the teaching-learning, research and community service engagements of academics by avoiding the behavioral aspects which are largely biased and politically motivated.

Recommendation 33

Develop an institutional training and development policy framework that aims to improve both the hard and soft skills of the academic staff in the short-run as well as in the long-run.

Recommendation 34

Improve career aspirations of academic staff through an institutional support system that helps them develop their career.

Recommendation 35

Establish competitive and holistic recruitment and selection policies and strategies that help the university identify the best mind in the country on a competitive basis.

Recommendation 36

Improve the communication system through the adoption of ICT technologies and institutionalise the virtual communication within an institution to accelerate the free flow of information and to ensure transparency.

7.4. CONCLUDING REMARKS

The investigation was undertaken to measure the influencing factors that trigger the propensity of academic staff to leave their institutions either to go abroad or to join other local institutions within the country. The study also examined the challenges and prospects of African tertiary education and suggested some key strategies to overcome the challenges. The study identified factors such as pay, working conditions, political instability, security situation of the country, and the larger economic and social context of the country in which the institutions were operating as the major determinants of the academic staff's decision to depart from the respective institutions. The attractiveness of the private sector (particularly the industry) and other public institutions is the key reason for academics (especially the young ones) leaving the universities locally. Further, the economic disparity between the developed and the developing countries, like those in Africa, is another reason why academics tend to leave their institutions to other economically more affluent countries. The study used a mixed method approach to investigate the problem. The findings suggest that multi-level engagement with all the stakeholders is something that needs urgent action in order to curb the outflow of Africa's brightest minds so that they remain in Africa and help change the face of Africa which is known to the world in terms of poverty and deprivation.

7.5. LIMITATIONS OF THE STUDY AND SUGGESTIONS FOR FUTURE RESEARCH

The research was limited in that it covered only a few universities in the two countries. It would have been much more representative if it covered all public universities in both countries (Ethiopia and South Africa). The study also targeted all academic staff members working at the three universities as its research population. The researcher suggests that a future study should focus on academics within different skill categories especially those with scarce skills such as engineers, information technology professionals, experts in the areas of finance and others; the factors contributing to their departure, the quit decision process, their preferred destinations (both locally and internationally) and their preference towards returning to their former institutions or their countries. In addition, the study adopted a cross-sectional time horizon in which the data was a snapshot at a particular time and in no means can the findings of the research be concluded for all higher education institutions in the respective countries. In order to overcome such limitations, the study adopted multiple data sources such as key informants, survey respondents and secondary sources. Yet, longitudinal research is suggested for future engagement to understand the trends regarding the propensity of academic staff to depart from the respective universities. Finally, it is suggested that the study be projected to cover other sectors including both the manufacturing and service sectors.

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APPENDIXES

APPENDIX A: COVER, CONSENT LETTERS, AND QUESTIONNAIRE

Information Sheet and Consent to Participate in Research

Date: _____

Dear Mr/Mrs/Miss/Dr/Prof

My name is Zelalem Bayisa Gurmessa, a PhD student from the School of Management, Information Technology and Governance of the University of KwaZulu-Natal, South Africa. My telephone number is +251911709181(in Ethiopia) and +249364669 (in South Africa) and my email address is zeeamour15@gmail.com. My Supervisor is Professor IW Ferreira (+27(0)0415044607) & my Co-Supervisor is Professor H Wissink (+27(0)312608962).

You are being invited to consider participating in a study that involves "A comparative perspective of academic brain drain at selected Universities in Ethiopia and South Africa". The aim and purpose of this research is to understand the antecedents or causes, consequences and impact of academic brain drain in the selected universities and to devise strategies to arrest the exodus of human capital from the higher education sector in general and the universities in particular. The data will be collected both via questionnaire and key informant interview. The data collected from the respondents will be kept anonymous and will be analysed to generate a report for academic purposes only. The duration of your participation if you choose to enroll and remain in the study is expected to be 50-55 minutes for interview and 30-40 minutes for filling in the questionnaire. The study is funded by the Ministry of Education of the Federal Democratic Republic of Ethiopia under the Ethiopian Doctoral Students Project at UKZN, South Africa. Through your participation we hope to understand the causes, consequences and impact of academic brain drain on the day-to-day activities of the selected universities in particular and the higher education sector in general and the results of the study are intended to contribute the human resources retention strategies and human resource capacity development efforts of the universities in Ethiopia and South Africa.

This study has been ethically reviewed and approved by the UKZN Humanities and Social Sciences Research Ethics Committee **(approval number HSS/2119/016D**).

In the event of any problems or concerns/questions you may contact the researcher at (telephone number is +251911709181 or +251911466399 (in Ethiopia) and +249364669 (in South Africa) or you may contact me through the following email:zeeamour15@gmail.com, whichever is convenient for you) or the UKZN Humanities & Social Sciences Research Ethics Committee, contact details as follows:

HUMANITIES & SOCIAL SCIENCES RESEARCH ETHICS ADMINISTRATION

Research Office, Westville Campus

Govan Mbeki Building

Private Bag X 54001
Durban
4000

KwaZulu-Natal, SOUTH AFRICA

Tel: 27 31 2604557- Fax: 27 31 2604609

Email: HSSREC@ukzn.ac.za

Your participation in this research is voluntary. You may refuse to participate or withdraw from the project at any time with no negative consequences. There will be no monetary gain for participating in this survey. Confidentiality and anonymity of records identifying you as a participant will be maintained by the SCHOOL OF MANAGEMENT, IT AND GOVERNANCE, and UKZN.

Your answers will be kept anonymous and confidential. To this end, personal identifiers will be removed from the questionnaire and an envelope will be provided to each participant so both a signed consents form and questionnaire will sealed before giving it back to the enumerators. The project team assures you that the data will be used for academic purposes only. The data collected will be stored in a safety box for at least five years under the jurisdiction of my co-supervisor at UKZN.

Sincerely,

Signature: _____ Date: _____

On separate page

CONSENT

I……(full names of participant) hereby confirm that I understand the contents of this document and the nature of the research project, and I consent to participating in the research project.

I understand that I am at liberty to withdraw from the project at any time, should I so desire.

SIGNATURE OF PARTICIPANT DATE

……

SECTION A: DEMOGRAPHIC VARIABLES

The following statements require information about yourself and your employer and they will not be used to identify any individual. Please fill in only one-person response per question.

For each question/statement, place a tick (✓) in the appropriate response column in the table below

Demographic Variables	Response
1 Gender	
Male	
Female	
2 Your age range	
< 30 years	
30-39 years	
40-49 years	
50-59 years	
60+ years	
3 For which University do you work?	
University of KwaZulu-Natal (UKZN)	
Addis Ababa University(AAU)	
Haramaya University (HU)	
4 Nationality	
Ethiopian	
South African	
If any other, please specify	
5 How long have you been working in your current university?	
Less than 1 year	
1 - <6 years	
6 - <10 years	
10 - <15 years	
15 - <20 years	
20 years and above	
6 What is your highest academic qualification?	
Bachelor's degree	
Masters	
Doctorate	
Post-doctoral degree	
If any other, please specify _____	
7 Your academic rank	
Full Professor	

Associate Professor	
Senior Lecturer/Assistant Professor	
Lecturer	
Junior/Developmental Lecturer/Assistant Lecturer	
If any other, please specify_____	
8 Employment situation	
Temporary	
Permanent	
Difficult to define/specify	
9 Average monthly income in ETB/ZAR (approximate)[8]	
Up to ETB 11, 130/ Up to R6745	
ETB 11,131 22,260/ R6746 - R13,490	
ETB 22,261 -33,390/ R13,491 - R20,230	
ETB 33,391- ETB 44,520/ R20, 231 - R26, 980	
ETB 44,521- 55, 650/ R26,981 - R33,730	
Above ETB 55,650/ Above R 33,730	
10 Marital status	
Single	
Married	
Widowed	
Divorced/Separated	
11 Area of specialisation	
Science, Technology and Engineering (SET)	
Business and Economics	
Health and Medical Sciences	
Social Science and Humanities	
Others, please specify	

[8] The approximate amount is calculated using the following rates: 1USD=22.26 ETB and 1R=1.65ETB on 3 November 2016 at 8:30am

SECTION B: VARIABLES RELATED TO BRAIN DRAIN

The following statements require information about factors contributing to academic staff intention to migrate and the resulting impact from human capital flight either to abroad or to other sectors (private or public) in the country.

Indicate your agreement with each statement:

		Strongly disagree	Disagree	Neutral	Agree	Strongly agree
QUALITY OF WORK LIFE (QWL)						
1.	I feel physically safe at work					
2.	I feel that my job is secure for life					
3.	I have good friends at work					
4.	I have enough time away from work to enjoy other things in life					
5.	I feel appreciated at work					
6.	People at work and/or within my profession respect me as a professional and an expert in my field of work					
7.	I feel that my job allows me to realise my full potential					
8.	I feel that I am realising my potential as an expert in my line of work					
9.	On the whole, I enjoy a good relationship with the people with whom I work					
10.	I feel that I am always learning new things that help do my job better					
11.	This job allows me to sharpen my professional skills					
12.	There is a lot of creativity involved in my job					
13.	My job helps me develop my creativity outside of work					

		Strongly disagree	Disagree	Neutral	Agree	Strongly agree
ORGANISATIONAL JUSTICE (OJ)						
1.	My work schedule is fair.					
2.	I think that my level of pay is fair					
3.	I consider my workload to be quite fair					
4.	Overall, the rewards I receive here are quite fair					
5.	I feel that my job responsibilities are fair					
6.	Job decisions are made by the general manager in an unbiased manner.					
7.	My dean/academic leader/head of department makes sure that all employee concerns are heard before job decisions are made					
8.	To make job decisions, my dean/academic leader/head of department collects accurate and complete information					
9.	My dean/academic leader/head of department clarifies decisions and provides additional information when requested by employees.					
10.	All job decisions are applied consistently across all affected employees.					
11.	Employees are allowed to challenge or appeal job decisions made by the dean/academic leader/head of department.					
12.	When decisions are made about my job, the dean/academic leader/head of department treats me with kindness and consideration.					
13.	When decisions are made about my job, the dean/academic leader/head of department treats me with respect and dignity					
14.	When decisions are made about my job, the dean/academic leader/head of department is sensitive to my personal needs.					
15.	When decisions are made about my job, the dean/academic leader/head of department deals with me in a truthful manner.					
16.	When decisions are made about my job, the dean/academic leader/head of department shows concern for my rights as an employee.					
17.	Concerning decisions made about my job, the dean/academic leader/head of department discusses the implications of the decisions					
18.	The general manager offers adequate justification for decisions made about my job.					
19.	When making decisions about my job, the dean/academic leader/head of department offers explanations that make sense to me.					
20.	My dean/academic leader/head of department explains very clearly any decision made about my job					

		Strongly disagree	Disagree	Neutral	Agree	Strongly agree
JOB SATISFACTION(JS)						
1.	I am satisfied with the competence of my supervisor in making decisions					
2.	I am satisfied with the respect and fair treatment I receive from my boss					
3.	My job offers me with the chance to do something that makes use of my abilities					
4.	I am satisfied with the way university policies are put into practice					
5.	I am satisfied with the amount of personal growth and development in my job					
6.	My job provides me with the chance to try my own methods of doing the job					
7.	My job provides me with the freedom to use my own judgement					
8.	I am satisfied with the overall working climate of this university					
9.	I am satisfied with the flexibility of work hours that my job offers me					
10.	I am satisfied with the extent of job security I have in this institution					
11.	I am satisfied with the feeling of accomplishment I get from the job					
12.	I am satisfied with the way my co-workers get along with each other					
13.	I am satisfied with the recognition I get from doing a good job					
LEADER-SUBORDINATE RELATIONSHIP (LMX)						
1.	I have a quality relationship with my supervisor					
2.	My supervisor trusts me even when I make genuine mistakes					
3.	My supervisor provides me with relevant information pertinent to my job					
4.	I find it easy to communicate with my supervisor					
5.	My supervisor is always happy to listen to my recommendations					
6.	My supervisor respects me well					
7.	My supervisor is always accessible to me					
REWARDS AND BENEFITS (R&B)						
1.	The salary I am paid is adequate to support my family					
2.	I am happy with the health benefits offered by my university					
3.	I am happy with the leave benefits offered by my university					
4.	The retirement benefits offered by my university are sufficient for me to lead a decent post-retirement life					
5.	Overall, the salary and benefits structure of this university is attractive to me					
6.	I am satisfied with the amount of pay and benefits I receive as a return for my contribution in this university					

		Strongly disagree	Disagree	Neutral	Agree	Strongly agree
ORGANISATIONAL CITIZENSHIP BEHAVIOUR (OCB)						
1.	I am willing to assist new colleagues in adjusting to the work environment					
2.	I am willing to help colleagues solve-work related problems					
1.	I am willing to cover work assignments for colleagues when needed					
2.	I take my job seriously and rarely makes mistakes					
3.	I comply with university rules and procedures even when nobody is watching and no evidence can be traced					
4.	I do not mind taking on new or challenging assignments					
5.	I am eager to tell outsiders good news about the university and clarify their misunderstandings					
6.	I make constructive suggestions that can improve the operation of the university					
7.	I actively attend university meetings					
8.	I do not speak ill of the supervisor or colleague behind their backs					
9.	I do not use illicit tactics to seek personal influence and gain with harmful effect on interpersonal harmony in the university					
10.	I do not take credit, avoid blame, and fight fiercely for personal gain					
11.	I do not conduct personal business on university time (e.g., shopping, going to beautify salon or barber shop or having coffee/tea with friends)					
12.	I do not use university resources to do personal business (e.g., university phones, university machines, computers and cars)					
13.	I do not view sick leave as a benefit and only take it when I am genuinely ill					
14.	I always do the best I can in my job					
INTENTION TO STAY/LEAVE						
1.	I desire and intend to remain at my university					
2.	I would like to continue working at this university for the rest of my career until retirement					
3.	I plan to work at my present job for as long as possible					
4.	I don’t intend to look for an alternative job in the near future					
5.	I would be sad to leave this job					
6.	I feel that I fit well within this institution					

Thank you for your co-operation!

APPENDIX B: COVER, CONSENT LETTERS AND INTERVIEW CHECKLIST

SCHOOL OF MANAGEMENT, IT AND GOVERNANCE

Dear Respondent,

PhD Research Project
Researcher: Zelalem Bayisa Gurmessa (+27(0) 846928310)
Supervisor(s): Professor IW Ferreira (+27(0)0415044607) & Professor H Wissink (+27(0)312608962)
Research Office: Ms. M Snyman (031 260 8350)

I, **Z**ELALEM BAYISA GURMESSA, a **PhD** student, at the **SCHOOL OF MANAGEMENT, IT AND GOVERNANCE**, of the University of Kwazulu Natal. You are invited to participate in a research project entitled **A COMPARATIVE PERSPECTIVE OF ACADEMIC BRAIN DRAIN AT SELECTED UNIVERSITIES IN ETHIOPIA AND SOUTH AFRICA**. The aim and purpose of this study is to: understand the antecedents or causes, consequences and impact of academic brain drain in the selected universities and to devise strategies to arrest the exodus of human capital from the selected universities in particular and the higher education sector in general.

Through your participation I hope to understand the causes, consequences and impacts of academic brain drain on the day-to-day activities of the selected universities in particular and the higher education sector in general. The results of the survey are intended to contribute the human resources retention strategies and to human resource capacity development efforts by the selected universities in Ethiopia and South Africa.

Your participation in this project is voluntary. You may refuse to participate or withdraw from the project at any time with no negative consequence. There will be no monetary gain from participating in this survey. Confidentiality and anonymity of records identifying you as a participant will be maintained by the SCHOOL OF MANAGEMENT, IT AND GOVERNANCE, UKZN.

If you have any questions or concerns about participating in this study, you may contact me or my supervisor at the numbers listed above.

This interview should take about **50-55** minutes to complete.

Sincerely

Investigator's signature_____ Date_____

On separate page

CONSENT

I……(full names of participant) hereby confirm that I understand the contents of this document and the nature of the research project, and I consent to participating in the research project.

I understand that I am at liberty to withdraw from the project at any time, should I so desire.

I hereby consent / do not consent to have this interview recorded

SIGNATURE OF PARTICIPANT_____DATE_____

……

INTERVIEW CHECKLIST

SECTION A: DEMOGRAPHIC INFORMATION OF THE RESPONDENTS

Demographic Variables	Response
1 Gender	
Male	
Female	
2 Your age range	
< 29 years	
30-39 years	
40-49 years	
50-59 years	
>60 years	
3 For which University do you work?	
AAU	
HU	
UKZN	
4 How long have you been working in your current university?	
Less than 1 year	
1 - <6 years	
6 - <10 years	
10 - <15 years	
15 - <20 years	
20 years and above	
5 What is your highest academic qualification?	
BA	
MA	

Demographic Variables	Response
PhD	
If any other, please specify _____	
6 Your academic rank	
Full Professor	
Associate Professor	
Assistant Professor	
Lecturer	
If any other, please specify_____	
7 Designation	
DVC/Vice President	
Dean/School head/Director	
Department/discipline head	
If any other, please specify _____	

SECTION B: INTERVIEW CHECKLIST RELATED TO BRAIN DRAIN

Themes	Questions
Theme 1: State and challenges of higher education	1. In your opinion, what do you think are the top challenges (sustainability challenges) facing your university? the sector? 2. In your opinion, what do you think are the top three human resources management related challenges and opportunities facing the higher education sector in your country? 3. In your opinion, what do you think are the mechanisms/strategies to overcome the challenges?
Theme 2: vulnerability to brain drain	4. Do you think that your discipline/school/college/university is vulnerable to academic brain drain? ☐ Yes ☐ No ☐ Not sure 5. How do you characterise the academic brain drain in your discipline/university? (Internal versus external)
Theme 3: Causes of brain drain	6. What do you think are the main reasons for causing academic staff turnover in your discipline/university? 7. Do you think that organisational change and transformation or structural adjustment programs in the higher education context have contributed to exodus of highly qualified and competent academic staff? How?
Theme 4: Impact of brain drain	8. How do you think the exodus of academic staff have impacted the execution of the mission of your university? In what way does brain drain impact the capacity of your university to execute its mission? 9. What do you think the long-term impact of the exodus of academic staff will be on the sustainability and competitiveness of your university in particular and the country in general?
Theme 5: Evaluating and managing brain drain	10. How do you monitor, evaluate and manage exodus of human capital from your discipline/university? Is there any mechanism to know the scale of the problem in your discipline/school/college/university? 11. Do you conduct exit interviews when people leave your university system? How do you know their reasons for leaving? 12. Who is responsible for monitoring the state of brain drain in your institution? How do you compare the extent of brain drain in your organisation with sister organisations in the same industry? Is there an industry standard to measure the extent or severity of brain drain at your university?
Theme 6: Strategies employed to retain competent and qualified faculty members	13. What do you think are the strategies employed by your university to retain their talents? Are there compulsory services required by staff members who have attended their postgraduate studies under the sponsorship of your institution? How many years of service are needed for one year of education? What was the challenge of managing these

	compulsory services? Do you think that it helped your institution to retain staff members? Do your faculty members stay after completing their compulsory services? 14. Which of the following HR policies and practices are widely applicable in your university? Induction programs? Coaching and mentoring? Succession planning programs? Performance management practices? Reward and benefits structure? Training and career development? Opportunities for career advancement? 15. How do you evaluate the conduciveness and suitability of your institution for attracting intellectuals or professionals living abroad to contribute back to the national human resource capacity development effort? What do you think are the major challenges and constraints that affect the implementation of this strategy? What macro and micro factors do you think will influence the endeavour to bring back intellectuals from abroad to contribute towards the development of the higher education sector in your country?

Thank you for participating in this interview

APPENDIX C: ETHICAL CLEARANCE

UNIVERSITY OF KWAZULU-NATAL
INYUVESI YAKWAZULU-NATALI

12 December 2016

Mr Zelalem Bayisa Gurmessa (213574534)
School of Management, IT & Governance
Westville Campus

Dear Mr Gurmessa,

Protocol reference number: HSS/2119/016D
Project title: A comparative perspective of Academic brain drain at selected universities in Ethiopia and South Africa

Full Approval – Expedited Application

In response to your application received on 08 December 2016, the Humanities & Social Sciences Research Ethics Committee has considered the abovementioned application and the protocol have been granted **FULL APPROVAL.**

Any alteration/s to the approved research protocol i.e. Questionnaire/Interview Schedule, Informed Consent Form, Title of the Project, Location of the Study, Research Approach and Methods must be reviewed and approved through the amendment/modification prior to its implementation. In case you have further queries, please quote the above reference number.

PLEASE NOTE: Research data should be securely stored in the discipline/department for a period of 5 years.

The ethical clearance certificate is only valid for a period of 3 years from the date of issue. Thereafter Recertification must be applied for on an annual basis.

I take this opportunity of wishing you everything of the best with your study.

Yours faithfully

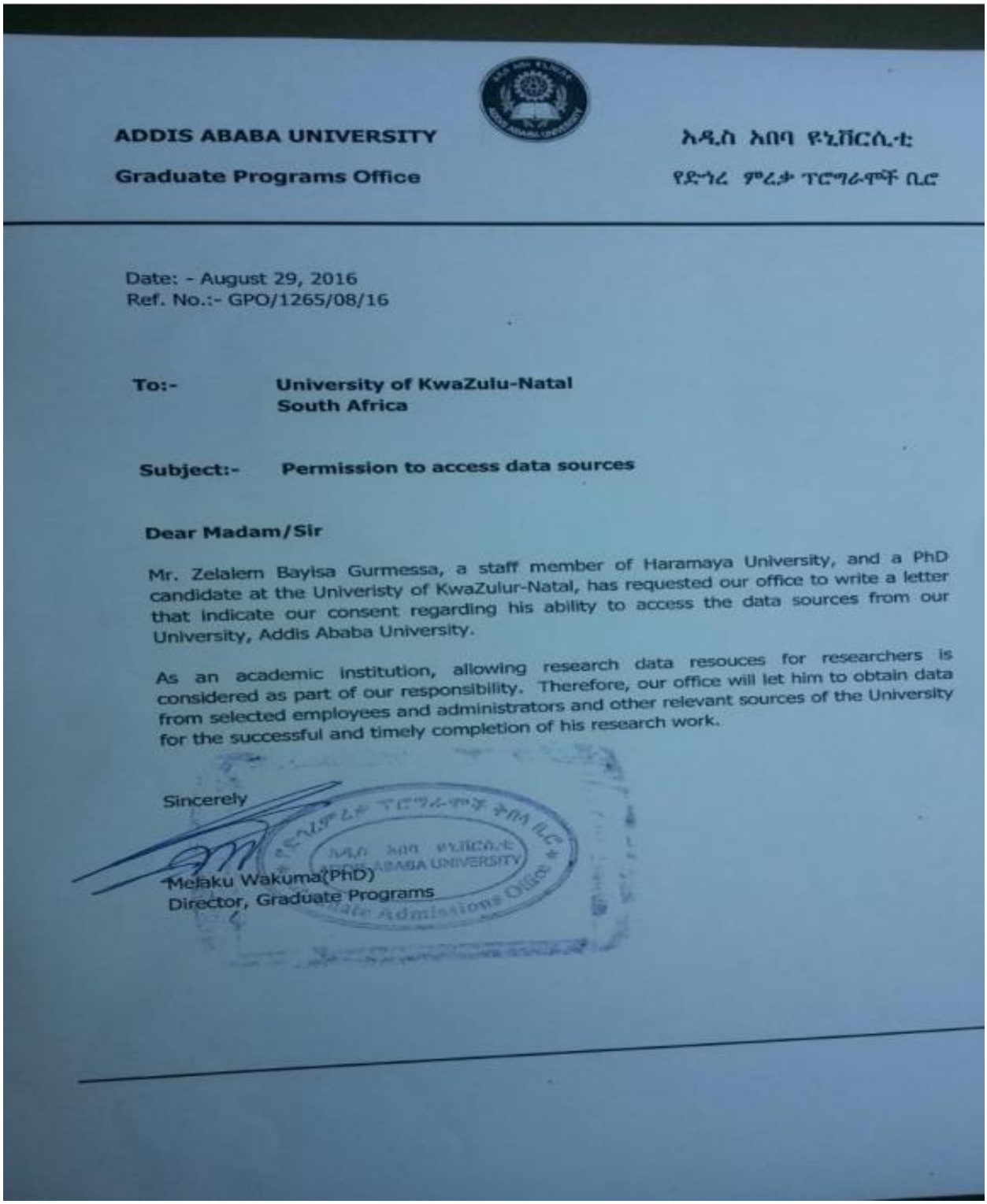
.....
Dr Shenuka Singh (Chair)

/ms

Cc Supervisor: Professor IW Ferreira and Professor H Wissink
Cc Academic Leader Research: Professor Brian McArthur
Cc School Administrator: Ms Angela Pearce

Humanities & Social Sciences Research Ethics Committee
Dr Shenuka Singh (Chair)
Westville Campus, Govan Mbeki Building
Postal Address: Private Bag X54001, Durban 4000
Telephone: +27 (0) 31 260 3587/8350/4557 **Facsimile:** +27 (0) 31 260 4609 **Email:** ximbap@ukzn.ac.za / snymanm@ukzn.ac.za / mohunp@ukzn.ac.za
Website: www.ukzn.ac.za

APPENDIX D: GATE KEEPERS LETTER FROM AAU



ADDIS ABABA UNIVERSITY

Graduate Programs Office

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የድኅረ ምረቃ ፕሮግራሞች ቢሮ

Date: - August 29, 2016
Ref. No.:- GPO/1265/08/16

To:- **University of KwaZulu-Natal**
South Africa

Subject:- **Permission to access data sources**

Dear Madam/Sir

Mr. Zelalem Bayisa Gurmessa, a staff member of Haramaya University, and a PhD candidate at the Univeristy of KwaZulur-Natal, has requested our office to write a letter that indicate our consent regarding his ability to access the data sources from our University, Addis Ababa University.

As an academic institution, allowing research data resouces for researchers is considered as part of our responsibility. Therefore, our office will let him to obtain data from selected employees and administrators and other relevant sources of the University for the successful and timely completion of his research work.

Sincerely

Melaku Wakuma(PhD)
Director, Graduate Programs

APPENDIX E: GATE KEEPERS LETTER FROM HU

HARAMAYA UNIVERSITY ሐረማያ ዩኒቨርሲቲ

138, Dire Dawa Ethiopia ☎ 0255530319/0255530323 ፖ.ሣ.ቁ. 138 ድሬዳዋ ኢትዮጵያ

ፋክስ 251-025-5530325/54 website: www.haramaya.edu.et

ቁጥር/Ref/No H.U/VPASA/12/21/16

ቀን/Date 23/8/16

To: University of KwaZulu-Natal (UKZN)
College of Law and Management Studies
School of Management, IT and Governance
Westville Campus
Private Bag X54362
Durban
4000
South Africa

Subject: **Consent Letter for Conducting PhD Research Study**

In response to your letter dated 16 August 2016 requesting a consent letter for conducting PhD research study taking Haramaya University in Ethiopia as his research setting, we hereby confirm that Mr. Zelalem Bayisa Gurmessa, a PhD student at University of Kwazulu-Natal (UKZN) in South Africa, is allowed to carry out his research project study entitled "**A comparative perspective of academic brain drain at selected universities in Ethiopia and South Africa**" in our institution.

Our colleges and schools will be sent a support letter so that Mr. Gurmessa will be given access to documents of relevance to his proposed PhD study.

We wish him all the best with his studies.

Best regards,

Belaineh Legesse (Ph.D)
V/President for Administration and Student Affairs

Federal Democratic Republic of Ethiopia Haramaya University

In Replying Please Quote Our Reference በጽሁልን የእኛን ደብዳቤ ቁጥርና ቀን ይጥቀሱ

BUILDING THE BASIS FOR DEVELOPMENT

APPENDIX F: LETTER OF COOPERATION FROM UKZN

UNIVERSITY OF KWAZULU-NATAL
INYUVESI YAKWAZULU-NATALI

25 July 2016

Mr Zelalem Bayisa Gurmessa (SN 213574534)
School of Management, IT and Governance
College of Law and Management Studies
Westville Campus
UKZN
Email: zeeamour15@gmail.com

Dear Mr Gurmessa

RE: PERMISSION TO CONDUCT RESEARCH

Gatekeeper's permission is hereby granted for you to conduct research at the University of KwaZulu-Natal (UKZN), towards your postgraduate studies, provided Ethical clearance has been obtained. We note the title of your research project is:

"A comparative perspective of the impact of brain drain at two sub-Saharan universities".

It is noted that you will be constituting your sample by handing out questionnaires to members of staff at UKZN.

Please ensure that the following appears on your questionnaire/attached to your notice:

- Ethical clearance number;
- Research title and details of the research, the researcher and the supervisor;
- Consent form is attached to the notice/questionnaire and to be signed by user before he/she fills in questionnaire;
- gatekeepers approval by the Registrar.

Data collected must be treated with due confidentiality and anonymity.

Yours sincerely

MR SS MOKOENA
REGISTRAR

APPENDIX G: ABSTRACT OF PUBLISHED MANUSCRIPT

Journal of Economics and Behavioral Studies (ISSN: 2220-6140)
Vol. 10, No. 3, pp. 169-186, June 2018

Demographic Factors as a Catalyst for the Retention of Academic Staff: A Case Study of Three Universities in Sub-Saharan Africa

ZB Gurmessa*[1], IW Ferreira[2,1], HF Wissink[1]
[1]University of KwaZulu-Natal, Westville Campus, South Africa
[2]Nelson Mandela Metropolitan University (NMMU), South Africa
*zeeamour15@gmail.com, naas1942@gmail.com, wissinkh@ukzn.ac.za

Abstract: The aim of the study was to determine the effect that demographic factors such as age, gender, marital status and education, as well as factors such as years of experience, income, academic rank, country of origin and area of specialisation have on academic staff working in the higher education sector in Sub-Saharan Africa. A survey approach was adopted as the main data collection tool and data was collected from three public Universities-University of KwaZulu-Natal (UKZN), Addis Ababa University (AAU) and Haramaya University (HU). The first university is located in South Africa and the last two universities are situated in Ethiopia. The survey was employed as a research design. A self-administered survey questionnaire consisting of both demographic variables (age, tenure, educational level, academic rank, employment status, marital status, average income level, and fields of specialisation) and six item turnover intentions or intentions to stay variables (measured a five-point Likert Scale in which 1= Strongly Disagree; 2= Disagree; 3= Neither Agree Nor Disagree; 4= Agree and 5= Strongly Disagree) were completed by 596 respondents selected by means of the stratified sampling method. The data was analysed using the Statistical Package of the Social Sciences(SPSS) software packages version 24. Both descriptive (frequencies, mean and standard deviation) and inferential (one-way-ANOVA) statistics were applied to examine the effect of the various demographic and other factors on the academic staff members' intentions to depart from or remain at the three universities. The study revealed that the effect of these factors on the academic staff's intention to depart or remain varied across the three universities. The study concluded that age, educational level, rank, employment status, marital status and area of specialisation were significant at HU but not at UKZN, where none of these factors were found to be significant predictors of a staff member's intention to depart from the university. The findings of this study will enable higher education leaders and human resource practitioners in general, but Ethiopian institutions in particular, to design an acceptable human resource strategy and policy, tailored to address diversity and overcome the temptations of "one-size-fits-all" retention strategies.

Keywords: *Intention to depart, demographic factors, academic staff, Ethiopia, South Africa.*

1. Introduction

Institutions of higher learning play a key role in producing and developing skilled manpower and the human capital needed for accelerating a nation's political, social/economic and technological development agendas worldwide (Baker, 2015; Nelson et al., 2017; Puteh, Nor & Zulkifli, 2012; Sawyerr, 2004). The capacity of these institutions to execute their mandate for learning, teaching, research and community service at a sustainable level largely depends on their ability to attract and retain highly qualified academic staff (Nelson et al., 2017). Organisations in the 21st century are largely diversified and the "one-size-fits-all" retention strategy jeopardises the ability of the institutions to attract and retain knowledge workers who usually have highly diversified needs and expectations. Furthermore, having the right mix of academics, in terms of quantity and quality, is paramount to ensure an institution's academic quality and has an impact on the overall performance of the institution.

Based on this presumption, this study examined the effect of demographic factors on the academic staff's intention to depart or remain in the context of the institutions of higher learning in sub-Saharan Africa. Previous studies revealed that employee intention to depart or remain is influenced, among other things, by socio-demographic factors (Agyeman & Ponniah, 2014; Akova, Cetin, & Cifci, 2015; Almalki, Fitzgerald, & Clark, 2012; Chowdhury, 2015; Emiroğlu, Akova, & Tanrıverdi, 2015; Ethiopia Demographic and Health Survey, 2011; Hatton & Williamson, 2003; Hundera, 2014; Lee, Dai, Park, & Mccreary, 2013; Samad, 2006; Sun, Luo, & Fang, 2013). Other studies, mostly in the context of western countries and to a certain extent

APPENDIX H: LANGUAGE EDITING CERTIFICATE

Editing certificate

TO WHOM IT MAY CONCERN

Language editing

I, Jeanne Enslin, acknowledge that I did the language editing of **Zelalem Bayisa Gurmessa's** thesis submitted in fulfilment of the requirements for the degree of Doctor of Philosophy in Human Resource Management.

The title of the thesis is:

A comparative perspective of academic brain drain at selected universities in Ethiopia and South Africa.

If any significant text changes are made to the electronic document that I sent to Zelalem on 27 October 2018, I cannot be held responsible for any errors that are made. Detailed feedback about the work done has been provided to Zelalem. As agreed, I did not do any formatting or correct any references as the student was responsible for those aspects.

The quality of the final document, in terms of language, all technical aspects and references remains the student's responsibility.

Jeanne Enslin

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17 York Close, Parklands, 7441. Cape Town. South Africa

jeanne.enslin@telkomsa.net or jeanneenslin@gmail.com